

Compiled by
John Dunne-Brady

Dictionaries are like watches; the worst is better than none, and the best cannot be expected to go quite true. – Samuel Johnson

REFERENCES AND ACKNOWLEDGMENTS

Biographical dates checked in *Authors of Plant Names* edited by R. K. Brummitt and C. E. Powell, Royal Botanic Gardens, Kew, 1992

Publication dates of scientific names checked primarily in the Missouri Botanical Garden database at: <http://www.tropicos.org> and secondarily in The International Plant Names Index at: <http://www.ipni.org/ipni/plantnamesearchpage.do>

Eponym citations linking a plant to a person came primarily from the following five books – or from searching the internet for the scientific name: [1] Britton, Nathaniel Lord and Brown, Addison – *Illustrated Flora of the Northern United States and Canada*, 3 volumes, Dover Publications, New York, New York, 1913, 1970; [2] Coombes, Allen J. – *Dictionary of Plant Names*, Timber Press, Portland Oregon, 1985; [3] Fernald, Merritt Lyndon – *Gray's Manual of Botany*, 8th edition, Dioscorides Press, Portland Oregon, 1950; [4] Hitchcock, Albert Spears and Agnes Chase, *Manual of the Grasses of the United States* [persons for whom grasses have been named, p. 984-990], Dover Publications, New York, New York, 1935, 1950, 1971, 1987; [5] Munz, Philip A. – *A California Flora*, University of California Press, Berkeley, Los Angeles, London, 1959, 1973

The following websites provided useful information:

Biographies: <http://www.calflora.net/botanicalnames/index.html>
Plant names: <http://ucjeps.berkeley.edu/interchange.html>
Plant names: <http://www.davesgarden.com/guides/botanary/>
Grasses: http://cahe.nmsu.edu/academics/anrs_courses/307_316/documents/eponymy-of-new-mexico-grass-names.pdf
Expeditions: <http://www.siarchives.si.edu/findingaids/faexppre1878.htm>
Collectors: http://www.sysbot.uni-goettingen.de/index_coll/Search_H.htm
Biographies: http://en.wikipedia.org/wiki/List_of_botanists
Biographies: <http://www.swcoloradowildflowers.com/index.htm>
RYDBERG: http://sciweb.nybg.org/science2/libr/finding_guide/rydberg.asp
STANSBURY: http://www.media.utah.edu/UHE/s/STANSBURY_HOWARD.html
SANVITALI: <http://www.calflora.net/botanicalnames/pageSA-SH.html>

UNDERWOOD: http://sciweb.nybg.org/science2/libr/finding_guide/underwb2.asp

Any comments, complaints, kudos, errors, omissions, suggestions or inaccuracies may be sent to dunnebrady@signalpeak.net

ABERT, James William (1820-1897); American army officer, explorer and topographical engineer; led expedition (1845) with Lt. William G. Peck and mountain-man Thomas Fitzpatrick as guide along the Canadian River to eastern New Mexico and the Texas panhandle; accompanied briefly by August FENDLER (1813-1883); sketched native plants, birds and animals; Peck and Abert under command of Gen. Stephen W. Kearney (summer 1846) surveyed northern New Mexico south to Socorro and visited the pueblos; eponyms: *Sanvitalia abertii* (A.Gray,1849) Abert Dome; *Eriogonum abertianum* (Torrey,1848) Abert Buckwheat; the towhee-finch *Pipilo aberti* also named in his honor.

ACHILLES (Αχιλλης) – In Greek mythology, hero of Trojan War; killed Hector his Trojan rival in battle; in turn killed by Paris with an arrow to his heel (his only weakness) – hence the phrase *an Achilles heel*; legends say at birth his mother immersed him in a yarrow tea bath which made him invincible except for the heels where she held him; an old physician-Centaur named Chiron taught Achilles the healing properties of yarrow; during the ten year siege of Troy, he made salves to stop his soldier's wounds from bleeding; plant name *achillea* coined by Roman naturalist and author Pliny the Elder (23-79 A.D.); yarrow stalks have been used in China for over 3000 years to elicit answers from the *I Ching* or Book of Changes; eponyms: *Achillea* (Linnaeus,1753) Yarrow; *Achillea millefolium* (Linnaeus,1753) Common Yarrow

ACOURT, Mrs. (?-?); amateur British botanist; genus named in her honor by Scottish botanist David Don in 1830; no other information available; North American species separated into *Acourtia* and South American species retained in *Perezia* (Lagasca,1811); eponyms: *Acourtia* (D.Don,1830) Desert Peony, Brownfoot; *A.thurberi* [A.Gray,1854] (J.L.Reveal+R.M.King,1973) {=*Perezia thurberi* (A.Gray,1854) Thurber Desert Peony; *A.wrightii* [A.Gray,1852] (J.L.Reveal +R.M.King,1973) {=*Perezia wrightii* (A.Gray,1852)} Wright Desert Peony; see also: PEREZ

ALLIONI, Carlo (1728-1804); Italian physician and botanist; professor of botany at Turin University; director of the Turin botanical garden; books: *Flora Pedemontana* [1785]; eponyms: *Allionia* (Linnaeus,1759) Trailing Four-O'Clock; *A.incarnata* (Linnaeus,1759) Trailing Windmills

ANDROMEDA (Ανδρομεδα) – In Greek mythology, daughter of Cassiopeia and Cepheus; her husband Perseus rescued her from a sea monster; also a northern constellation located between Pisces and Cassiopeia named in her honor; eponyms: *Andromeda* (Linnaeus, 1753) Moorwort, Bog Rosemary, Marsh Rosemary; *Pterospora andromedea* (Nuttall,1818) Pine Drops

ARTEMIS (Αρτεμις) – In Greek mythology, moon goddess, virgin huntress, daughter of Zeus and Leto, and twin sister of Apollo (born first, she assisted her mother at his birth); patroness of wild animals; patroness of midwives and women giving birth; known to the Romans as Diana; Linnaeus named the genus *Artemisia* (wormwood-mugwort) in her honor; the classical Greek plant name: artemisia (αρτεμισια) was applied especially to *Artemisia vulgaris* (common mugwort), but also to species of *Ambrosia* (ragweed), *Parthenium* (feverfew), *Senecio* (ragwort-

groundsel) and *Chrysanthemum* (corn marigold); name said by Pliny the Elder (23-79 A.D.) to honor Artemisia, queen of Caria in Asia Minor; her husband king Mausolus reigned from 377-353 B.C.; she caused structure known as the Mausoleum built at capital city of Halicarnassus (completed around 350 B.C.); considered a tomb, but possibly a temple in which worshipers enacted sacred dramas of death and rebirth; one of the Seven Wonders of the Ancient World; very likely the queen herself was named in honor of the goddess Artemis; eponyms: *Artemisia* (Linnaeus,1753) Wormwood-Mugwort; *A.carruthii* (A.W. Wood ex Carruth,1877) Carruth Sagewort; *A.dracunculus* (Linnaeus,1753) Tarragon; *A.filifolia* (Torrey,1827) Sand Sage; *A.franserioides* (E.L.Greene,1883) Ragweed Sagebrush; *A.ludoviciana* (Nuttall,1818) Louisiana Sage

ASCLEPIAS (Ασκληπιάς) – In Greek mythology, god of medicine and healing; spelled Asculapius in Latin; eponyms: *Asclepias* (Linnaeus,1753) Milkweeds; *A.asperula* [Decaisne, 1844] (Woodson,1954) Antelope Horns Milkweed; *A.involucrata* (Engelmann ex Torrey,1859) Dwarf Milkweed; *A.latifolia* [Torrey,1827] (Rafinesque,1832) Broadleaf Milkweed; *A.speciosa* (Torrey,1827) Showy Milkweed; *A.subverticillata* [A.Gray,1876] (Vail,1898) Poison Milkweed; *A.tuberosa* (Linnaeus,1753) Butterfly Milkweed

BACCHUS – In Roman mythology, god of fertility, wine, revelry and sacred drama; name derived from Latin: bacca = a fruit or berry; equivalent to Greek god Dionysos; eponyms: *Baccharis* (Linnaeus,1753) Desert Brooms, Seep Willows; *B.emoryi* (A.Gray, 1859) Emory Baccharis; *B.pteronioides* (DeCandolle,1836) Yerba del Pasmó; *B.salicifolia* [Ruiz+Pavon,1798] (Persoon,1807) Seep Willow; *B.sarothroides* (A.Gray,1882) Desert Broom

BAHI, Juan Francisco (1775-1841) Spanish botanist; professor of botany at Barcelona; no other information available; eponyms: *Bahia* (Lagasca,1816) Bahia; *B.absinthifolia* (Bentham,1839) Sage-Leaf Bahia

BAILEY, Jacob Whitman (1811-1857) American naturalist, scientist and microscope researcher; graduated from West Point (1832); taught chemistry, mineralogy and geology at West Point (1834-18-?); devised improvements to microscope construction; made extensive collections and sketches of algae; president of American Association for Advancement of Science (1857); wrote articles for American Journal of Science; studied infusoria fossils of California; eponyms: *Baileya* (Harvey+A.Gray ex Torrey,1848) Desert Marigold; *B.multiradiata* (Harvey+A.Gray, 1849) Desert Marigold

BAKER, Charles Fuller (1872-1927) American botanist, teacher and amateur entomologist; trained at Michigan Agricultural College; administrator at Colorado Agricultural Experiment Station in Fort Collins; collected in Colorado and northern New Mexico (1899); early botanical discoveries published by Edward Lee GREENE (1843-1915) in three volume *Plantae Bakerianae* [1901]; taught in Alabama and Missouri (1900-1901); collected in California and obtained masters degree at Stanford (1903); taught briefly at Pomona College (1904); collected in Cuba, Brazil and Philippines (1905-1910); returned briefly to Pomona (1911-1912); professor

of agronomy and agriculture at University of the Philippines (1913-1918); dean of its Agricultural College (1918-1927); contributed entomological collections to the United States National Museum; eponyms: *Agropyron bakeri* (E.E.Nelson,1904) {=*Elymus bakeri* [E.E.Nelson,1904] (A.Löve,1980)} Baker WheatGrass

BARRELIER, Jacques (1606-1673); early French medical botanist, Dominican monk, author, gardener and plant engraver; studied the floras of France, Spain and Italy; lived for many years in Rome and created a botanical garden; made detailed copper plates of his plants; shortly after he died of asthma, fire destroyed his records, but over 1300 illustrations survived; posthumously edited and published by the French botanist Antoine de Jussieu (1686–1758) director of the Jardin des Plantes in Paris; book: *Icones Plantarum per Galliam, Hispaniam et Italiam Observata ad Vivum Exhibitarum* [1714]; eponyms: *Barleria* (Linnaeus,1753) Philippine Violet; *Eragrostis barrelieri* (Daveau,1894) Barrelier Love Grass, Mediterranean Love Grass

BAUHIN, Caspar [Gaspard] (1560-1624); early Swiss-French botanist; name spelled BAUHINUS in Latin; son of Jean Bauhin (1511–1582) French physician to Johanna of Albret (Queen of Navarre) who moved to Basel (Switzerland) from Amiens (France) after converting to Protestantism; younger brother of Jean [Johann, Johannes] Bauhin (1541-1612) see below; born in Basel; studied medicine and human anatomy at Padua in Montpellier and also in Germany; returned to Basel (1580) and gave lectures in botany and anatomy; professor of Greek at University of Basel (1582); professor of anatomy, medicine and botany at University of Basel (1588); university rector and dean of faculty; books: (a) *Pinax Theatri Botanici* [1596] described and classified over 6000 plants; introduced many names later adopted by Linnaeus; used sparse plant descriptions which sometimes anticipated modern binomials; (b) *Theatrum Botanicum* [1658] twelve parts intended, three finished, one published posthumously; (c) edited works of Pietro Andrea MATTIOLI (1500-1577); (d) *Theatrum Anatomicum Infinitis Locis Auctum* [1592] on human anatomy; Linnaeus named a large tropical genus after the two brothers in 1753; eponyms: *Bauhinia* (Linnaeus,1753) Orchid Trees; *Senna bauhinioides* [A.Gray,1850] (H.S.Irwin+Barneby,1979) {=*Cassia bauhinioides* (A.Gray,1850) Twin Leaf Senna

BAUHIN, Jean [Johann, Johannes] (1541-1613); early Swiss-French botanist; name spelled BAUHINUS in Latin; son of Jean Bauhin (1511–1582) French physician to Johanna of Albret (Queen of Navarre) who moved to Basel (Switzerland) from Amiens (France) after converting to Protestantism; older brother of Caspar [Gaspard] Bauhin (1560-1624) see above; born in Amiens; studied botany at Tübingen under Leonhart FUCHS (1501-1566); traveled and collected plants with Conrad von GESSNER (1516-1565); practiced medicine at Basel; elected professor of rhetoric in Basel (1566); became physician to Duke Frederick I of Württemberg at Montbéliard (1570) and remained so until 1613; established a large personal botanical garden; book: *Historia Plantarum Universalis* [1650-1651] co-authored with Johann Heinrich CHERLER (1570-1610) and published posthumously; Linnaeus named a large tropical genus after the two brothers in 1753; eponyms: *Bauhinia* (Linnaeus,1753) Orchid Trees; *Senna bauhinioides* [A.Gray,1850] (H.S.Irwin+Barneby,1979) {=*Cassia bauhinioides* (A.Gray,1850) Twin Leaf Senna

BERLANDIER, Jean Louis (c.1805-1851) French botanist, explorer and plant collector; born near Fort-de-l'Ecluse, France; worked as apprentice to Geneva drug company; self taught in botany and tutored by renowned Swiss botanist Augustin Pyramus DeCandolle (1778-1841); studied *Campanulaceae* (bluebell family) and *Grossulariaceae* (gooseberry family); monographs included in DeCandolle's masterwork *Prodromus* (1828); first botanical explorer and collector in Mexico and Texas on a Mexican boundary survey under General don Jose Manual Rafael Simeon de Mier y Teran (1827-1830); traveled to Laredo, Béxar, Nacogdoches, the Guadeloupe River and Matamoros with a side trip to New Orleans; settled in Matamoros when survey dissolved (c.1830); made further trips to Nuevo Leon, Brazos de Santiago and Tamaulipas; sent about 52,000 specimens to DeCandolle (1827-1831) but poor quality frustrated his mentor and communications ceased; remained in Mexico and became a pharmacist and physician at Matamoros, apparently well-liked; died crossing San Fernando River (summer 1851); eponyms: *Berlandiera* (DeCandolle,1836) Green Eyes, Chocolate Flower; *B.lyrata* (Bentham, 1839) Berlandier Green Eyes, Berlandier Chocolate Flower; *Chenopodium berlandieri* (Moquin, 1840) Berlandier GooseFoot; *Chrysopsis berlandieri* (E.L.Greene, 1894) Berlandier Golden Aster; *Citharexylum berlandieri* (B.L. Robinson,1891) Berlandier FiddleWood; *Fraxinus berlandieriana* (DeCandolle,1844) Berlandier Ash; *Gnaphalium berlandieri* (DeCandolle,1838) Berlandier EverLasting; *Lippia berlandieri* (Schauer,1847) Berlandier BeeBush; *Oenothera berlandieri* (Walpers,1843) Berlandier Evening Primrose; *Phragmites communis* var. *berlandieri* [E.Fournier,1877] (Fernald,1932) {=*Phragmites berlandieri* (E.Fournier,1877)} Berlandier Reed; *Vitis berlandieri* (Planchon,1880) Berlandier Grape

BIGELOW, John Milton (1804-1878) American botanist and army surgeon; botanist and surgeon on the Mexican Boundary Survey (1850-1853); collected plants east of Albuquerque in the Sandia Mountains (autumn 1853); surgeon and botanist on Pacific Railroad Expedition and Survey along the 35th parallel (1853-1855) with George ENGELMANN under command of Lieutenant A. W. WHIPPLE (1816-1863); books: *Report on the Botany of the Pacific Railroad Expedition and Survey* (1856); Engelmann+Bigelow *Description of Cactaceae* (1856); eponyms: *Blepharidachne bigelovii* [S.Watson,1871] (Hackel,1889) {=*Eremochloe bigelovii* (S.Watson, 1871)} Bigelow Centipede? Grass; *Carphochaete bigelovii* (A.Gray,1852) Bigelow Carphochaete; *Dieteria bigelovii* [A.Gray,1852] (D.R.Morgan+R.L.Hartman,2003) {=*Aster bigelovii* (A.Gray,1852)} Sticky Aster; *Hymenoxys bigelovii* [A.Gray,1853] (K.F.Parker,1950) {=*Actinella bigelovii* (A.Gray,1853)} Bigelow Rubberweed; *Mirabilis bigelovii* (A.Gray, 1886) Bigelow Four O'Clock; *Nolina bigelovii* [Torrey,1857] (S.Watson,1879) {=*Dasylyrion bigelovii* (Torrey,1857)} Bigelow Bear Grass; *Opuntia bigelovii* (Engelmann,1856) Bigelow Prickly Pear; *Poa bigelovii* (Vasey+Scribner,1885) Bigelow Blue Grass; *Senecio bigelovii* (A.Gray,1857) Nodding Groundsel

BLADH, Peter Johan (1746-1816); Finnish botanist, plant collector and naturalist; employed by Swedish East India Company; collected primarily around Hongkong and Canton in China; eponyms: *Bothriochloa bladhii* [Retzius,1781] (S.T.Blake,1969) Australian Bluestem Grass {=*Andropogon bladhii* (Retzius,1781)}

BOCK, Jerome Hieronymus (1498-1554); early German herbalist, botanist, physician and Lutheran minister; name also spelled BOCH; principally known by pseudonym Hieronymus TRAGUS (derived from Greek: tragos (τραγος) = a he-goat); born to poor parents in Heidesbach near Heidelberg; suffered from consumption; education uncertain; possibly taught at local monastery, or entirely self-taught, or graduated from University of Heidelberg (c.1519); decided not to become monk; married Eva Victor (1523); eight of ten children died very young; settled in Zweibrücken (1523) as grounds keeper, school teacher and court physician for Count Palgrave Ludewig – Palatinate of Zweibrücken (1523-1532); added many plants to gardens; when the Lutheran Count died, his successor Frederick II sided with Catholic Church; Bock lost positions and family became destitute; intervention by a friend and divided sympathies produced quasi-official position as Lutheran minister at former Catholic Church dedicated to Saint Fabian in nearby village of Hornbach (1532); simultaneously, he collected and studied German plants, especially their medicinal properties, distribution and ecology; often traveled in poverty dressed as peasant; published unillustrated *Kreuterbuch* [Herbal Book] first edition in German (1539); Catholics re-established local power, evicted him and family again destitute (c.1540); invited to live at castle of former patient Count Philip of Nassau (c.1542-c.1551) earlier treated for a serious illness; published an illustrated second edition of *Kreuterbuch* with etchings by David KANDEL (1546); rejected traditional plant arrangement used by DIOSCORIDES in *De Materia Medica*; classified 700 species based on resemblances; Saint Fabian's church eliminated Catholics, reverted to Luther and invited Bock's return (c.1551); remained as pastor (c. 1551-1554); thus a possibly unlicensed country doctor and perhaps unordained preacher survive; died from consumption on February 21st, 1554; buried in Hornbach; [condensed from E. L. Greene's – *Landmarks of Botanical History* – pages 304-359]; eponyms: *Tragus* (Haller,1768) Tragus Grass; *Tragia* (Linnaeus,1753) *Tragia* Spurge; *Tracemosa* [Linnaeus,1753] (Allioni, 1785) {=*Cenchrus racemosus* (Linnaeus,1753)} Nose Burn; *Salsola tragus* (Linnaeus,1762) Tumbleweed, Russian Thistle

BOECHER [BÖCHER], Tyge Wittrock (1909-1983); Danish botanist, evolutionary biologist, plant ecologist and phytogeographer; professor of botany at University of Copenhagen (1954-1979); studied floras of Greenland, Denmark, European mountains and Argentina; studied vascular plants, bryophytes, lichens and algae; worked on cytology, anatomy, ecology and evolution of plant populations and communities; co-founder of *Flora Europaea*; eponyms: *Boechea* (Á.Löve+D.Löve,1975) {~*Arabis* (Linnaeus,1753) Rock Cress; *B.drummondii* [A.Gray,1864] (Á.Löve+D.Löve,1975) {=*Arabis drummondii* (A.Gray,1864)} Drummond Rock Cress; *B.perennans* [S.Watson,1887] (W.A.Weber,1982) {=*Arabis perennans* (S.Watson,1887)} Perennial Rock Cress

BOERHAAVE, Hermann (1668-1738); early pre-Linnaean Dutch physician and botanist from Leiden; developed a system of medical clinical teaching based on bedside observations; drew students from all across Europe who carried his ideas back to their native countries, including Peter the Great from Russia in 1715; spoke most major European languages; lectured in Latin; studied botany, chemistry, mathematics, medicine and anatomy; received doctorate in philosophy

from the University of Leiden (1689) and doctorate in medicine from Harderwyck (1693); taught medicine, botany and chemistry at University of Leiden (1701-1738); described many new plant species; improved the University botanical garden; elected to French Academy of Sciences and Royal Society in London; work frequently cited by Linnaeus in *Species Plantarum* [1753]; books: *Institutiones Medicae* (1708), *Aphorismide Cognoscendis et Curandis* (1709), *Elementia Cheminae* (1724); eponyms: *Boerhavia* (Linnaeus,1753) Spiderling; *B.coccinea* (Miller,1768) Scarlet Spiderling; *Draba verna* var. *boerhavii* (H.C.Hall,1821)

BOLLE, Carl [Karl] August (1821-1909); German naturalist, ornithologist and botanical collector; born in Berlin; heir to wealthy brewing family; studied medicine and natural science at Berlin and Bonn; visited Cape Verde and Canary Islands (1852 and 1856); published eight new plant species descriptions from Canary Islands, five based on own collections, others collected earlier by Eugène Bourgeau and Philip Barker Webb; book: *Meiner Zweiter Beitrage zur Vogelkunde der Canarischen Inseln* [1857]; founding member of the German Ornithological Society [1867]; succeeded Alfred Brehm as Chairman (1884); died, February 17, 1909; private herbarium left to Berlin Herbarium, but most specimens destroyed during World War II; some survived perfectly preserved; eponyms: *Phoradendron bolleanum* (Eichler,1868) Bolle Mistletoe; *Columba bollii* (Bolle's Laurel Pigeon) of Canary Islands also named for him by Frederick DuCane Godman

BOMMER, Joseph [Jean, Jules] Édouard (1829-1895); Flemish botanist and plant collector; born in Brussels; no formal botany education; hired as assistant to Henri GALEOTTI (1814-1858) director of Belgium National Herbarium and Botanic Garden to help develop scientific collections (1856); founding member of Société Royale de Botanique de Belgique (1862); published monograph on ferns (1867); became herbarium director of collections (prior to 1870); became professor at State Horticultural School in Vilvorde (1870); temporary director of Botanic Garden (1870-1875); became professor of botany at University of Brussels (1872); when Edouard Dupont became Botanic Garden's full director (1875) he remained head of collections (1875-1895); collected with his wife Elisa Caroline Bommer (1832-1910) and sometimes with M. H. Rousseau (1850-1926) in central Africa, Namibia and South Africa (1884-1891); papers on ferns published after his death; eponyms: *Bommeria* (E.Fournier,1876) Copper Ferns; *B.hispida* [Mettenius ex Kuhn,1869] (Underwood,1902) {=*Gymnogramma hispida* (Mettenius ex Kuhn,1869)} Hairy Copper Fern

BOUTELOU, Claudio y Soldevilla (1774-1842); Spanish botanist who wrote about flower structures and agriculture; professor of agriculture in Madrid; and his brother, Estéban y Soldevilla (1776-1813) also a Spanish botanist; eponyms: *Bouteloua* [Lagasca, 1805] emended by (Lagasca,1816) {=*Botelua* (Lagasca,1805)} Grama Grasses; *B.aristidoides* [Kunth,1815] (Grisebach,1864) {=*Dinebra aristidoides* (Kunth,1815)} Needle Grama Grass; *B. barbata* (Lagasca,1805) Six-Weeks Grama Grass; *B.curtipendula* [Michaux, 1803] (Torrey,1853) {=*Chloris curtipendula* (Michaux, 1803) Side-Oats Grama Grass; *B.eriopoda* [Torrey, 1848] (Torrey,1857) {=*Chondrosum eriopodum* (Torrey,1848)} Black Grama Grass; *B.gracilis* [Kunth, 1815] (Lagasca ex Steudel,1840) {=*Chondrosum gracile* (Kunth,1815)} Blue Grama Grass;

B.hirsuta (Lagasca,1805) Hairy Grama Grass

BRANDEGEE, Townshend Stith (1843-1925) American botanist and civil engineer; married Mary Katherine CURRAN (1844-1920) American botanist and physician; studied flora of Mexico; donated their herbarium and botanical library to University of California in 1906; eponyms: *Arracacia brandegei* (J.M.Coulter+Rose,1895) Peruvian Carrot; *Galium brandegeei* (A.Gray,1877) Cleavers-Bedstraw

BRICKELL, Dr. John (1749-1809); Irish born American botanist; arrived in United States (1770); practiced medicine in Savannah, Georgia; collected in South Carolina and Georgia; corresponded regarding southern plants with American botanist Gotthilf Heinrich Ernst MUHLENBERG (1753-1815) and English nurseryman John FRASER (1750-1811) who collected in North America; the American botanist Stephen ELLIOTT (1771-1830) honored him in *A Sketch of the Botany of South-Carolina and Georgia* [1824]; eponyms: *Brickellia* (Elliott, 1824) Brickell Bush; *B.brachyphylla* [A.Gray, 1849] (A.Gray,1852) Plumed Brickell Bush; *B.californica* [Torrey+ A.Gray,1841] (A.Gray,1849) California Brickell Bush; *B.eupator-ioides* [Linnaeus,1763] (Shinners,1971) False Boneset; *B.floribunda* (A.Gray,1853) Chihuahuan Brickell Bush; *B.grandiflora* [W.J.Hooker,1834] (Nuttall,1840) Tassel Flower; *B.lemmonii* var. *wootonii* [E.L.Greene,1897] (B.L.Robinson, 1917) Lemmon Brickell Bush; *B.squamulosa* (A.Gray,1880) ScaleLeaf Brickell Bush; *B.venosa* [Wooton+Standley,1913] (B.L.Robinson, 1917) Veiny Brickell Bush

CAESALPINI, Andreas (1519-1603); early Italian botanist, philosopher and physician to Pope Clement VIII; also spelled: Andrea CESALPINO; published a botany text with a taxonomic system based on plant reproductive structures; theologians denounced the book because they believed plants had no sexual parts, according to Genesis, God created plants on the third day before he created male and female animals and humans on the sixth day; book: *De Plantis Libri* [1583]; eponyms: *Caesalpinia* (Linnaeus,1753) Bonduc Nut, Nicker Nut, Brazil Wood, Poinciana, Sappan Wood; *C.gilliesii* [Wallich in W.J.Hooker,1830] (D.Dietrich,1840) {=*Poinciana gilliesii* (Wallich in W.J.Hooker,1830)} Bird of Paradise; see also: GILLIES

CARLOWRIGHT see WRIGHT

CALYPSO (Καλυπσω) – In Greek mythology, a goddess or nymph who detained Odysseus on the island of Ogygia for seven years in the *Odyssey* by Homer; Calypso was also a Latin surname for the Roman goddess Venus, equivalent to the Greek Aphrodite; eponyms: *Calypso* (Salisbury, 1807) Fairy Slipper, Calypso Orchid; *C.bulbosa* [Linnaeus,1753] (Oakes,1842) {=*Cypripedium bulbosum* (Linnaeus,1753)} Fairy Slipper, Calypso Orchid

CARRUTH, James Harrison (1807-1896) American botanist; professor at Baker University, Baldwin City, Kansas; studied flora of Kansas; published papers in *Transactions of the Kansas Academy of Science*; had an extensive correspondence with the American botanist Bernard Bryan Smyth (1843-1913) professor at Kansas State University and later Ohio State University;

eponyms: *Artemesia carruthii* (A.W.Wood ex Carruth,1877) [discovered by Carruth and published by Alphonso W. Wood]

CASTILLEJO, Domingo (1744-1793) Spanish botanist; professor of botany at Cadiz; another Spanish botanist and physician Jose Celestino Bruno Mutis (1732-1808) also born in Cadiz studied the flora of Columbia from 1760 onwards; he sent many plant specimens to Linnaeus (father and son) and dedicated a genus to his fellow countryman in 1781 which was published in 1782 in *Supplementum Plantarum* by the younger Linnaeus; eponyms: *Castilleja* (Mutis, 1781 ex C.Linnaeus,1782) Paint Brushes; *C.austromontana* (Standley +Blumer,1911) Southern Mountain Paint Brush; *C.integra* (A.Gray, 1859) Foothills Paint Brush; *C.lanata* (A.Gray,1859) Woolly Paint Brush

CEVALLOS, D. Pedro (?-?) Spanish Ministro de Estado (?-?); a genus named in his honor was published in 1805 by the Spanish botanist Mariano Lagasca y Segura (1776-1839) director of the Madrid Botanical Garden in *Varietades de Ciencias, Literatura y Artes*; eponyms: *Cevallia* (Lagasca,1805); *C.sinuata* (Lagasca,1805) Stinging Serpent

CLAYTON, John (c.1686-1773) British born American botanist and lawyer; born in Fulham, Middlesex, England; father moved to Virginia as secretary to Lieutenant-Governor Edward Nott (c.1711-1713) and then Attorney General of Virginia Colony (1713-1737); Clayton emigrated to Virginia (1715); studied law; clerk of Gloucester County Court House (1720-1765); married Elizabeth Whiting (c.1721); home thought to have been on Pianketank River with a large garden; had eight children; friend of Mark CATESBY (1682-1749) artist and naturalist who came to Virginia in 1712; probably joined Catesby on expedition to Blue Ridge Mountains; sent plant specimens to Catesby in England (1734-1739) who gave them to Johannes Fridericus GRONOVIVS (1690-1762) who published first edition of *Flora Virginica* (1739-1743); Carolus Linnaeus (1707-1778) knew Gronovius and studied the specimens; Clayton also sent seeds to George CLIFFORD (1685-1760) in Hartekamp (near Haarlem, Holland) where Linnaeus classified and described plants growing on Clifford's estate (1735-1737); Clifford sent the Linnaeus book *Hortus Cliffortianus* to Gronovius and Clayton (1739); long-distance friend with Peter COLLINSON (1694-1768) London merchant and his protégé John BARTRAM (1699-1777) of Philadelphia who later became King's botanist (1765); Collinson encouraged Clayton to collect mosses and non-flowering plants; court house and home destroyed by British during war of independence; very few records remained; eponyms: *Claytonia* (Linnaeus, 1753) Spring Beauty; *C.lanceolata* (Pursh,1814) Western Spring Beauty; *Osmorhiza claytoni* [Michaux, 1803] (C.B.Clarke,1879) {=*Myrrhis claytonii* (Michaux,1803)} Clayton Sweet Cicely; *Osmunda claytoniana* (Linnaeus,1753) Clayton Royal Fern

COCKERELL, Theodore Dru Alison (1866-1948); British born American entomologist, zoologist and botanist; born in Norwood, England, near London; studied at Middlesex Hospital Medical School; developed tuberculosis and looked for a climate cure (1886); settled in Colorado, studied botany and explored in southwestern United States (1887-1890); briefly returned to England (1890); curator of Public Museum at Kingston, Jamaica (1891-1901);

tuberculosis returned; entomologist at New Mexico Agricultural Experiment Station and professor of entomology and zoology at New Mexico College of Agriculture at Las Cruces (1900-1903); curator of Colorado College Museum at Colorado Springs (1903-1904); professor of systematic zoology and entomology at University of Colorado at Boulder (1906-1934); retired to San Diego (1934-1948); studied Hymenoptera, Hemiptera, Mollusca, paleontology and evolution; published over 9,000 species and genera of insects, especially bees; studied fossil insects from Colorado; eponyms: *Sedum cockerelli* (Britton,1903) Cockerell Stonecrop

COMMELIN, Caspar (1668-1731); early Dutch Botanist; nephew of Jan COMMELIN (1629-1692) see below; family name also spelled COMMELIJN; born October 14, 1668 in Amsterdam; son of Casparus Commelin a bookseller and newspaper publisher and his first wife Margrieta Heydanus; Casparus' brother Isaac was a historian and father of Jan; enrolled September 12, 1692 at Leiden as student of medicine; graduated February 27, 1694; dissertation on earthworms; settled in Amsterdam; appointed to succeed his uncle as botanist at Amsterdam Botanical Garden (1696) after Peter Hotton transferred to Leiden; finished several books started by his uncle; Frederik RUYSCH arranged for city of Amsterdam to finance publication; studied rare and exotic plants; appointed co-professor at Athenaeum Illustre (1706) with Frederik Ruysch who worked on indigenous plants while Commelijn studied exotics; appointed inspector of Collegium Medicum (); portrait painted by Cornelis Troost now in Amsterdam Historical Museum; books: *Flora Malabaricus* [1696], *Horti Medici Amstelodamensis Rariorum* [1697-1701]; *Exotic Plants* [1703], *Rare and Exotic Medicinal Plants* [1706]; succeeded by Johannes BURMANN at Amsterdam Botanical Garden; died December 25, 1731 in Amsterdam; eponyms: *Commelinaceae* (R.Brown,1810) Day Flower Family; *Commelina* (Linnaeus,1753) Day Flower; *C.dianthifolia* (Delile,1812) Birdbill Day Flower

COMMELIN, Jan [Johan] (1629-1692); early Dutch botanist; uncle of Caspar COMMELIN (1668-1731) see above; family name also spelled COMMELIJN; born April 23, 1629 in Amsterdam; son of historian Isaac Commelin; Isaac's brother Casparus was a bookseller and newspaper publisher and father of Caspar; studied exotic foreign plants received from South Africa, Ceylon, Malabar coast of India and Indonesia; developed new classification system; cultivated exotic plants at Zuyderhout a farm near Haarlem; sold medicinal herbs to hospitals and apothecaries in Amsterdam, Leiden and Utrecht to help combat plague epidemics (1634-1637); appointed alderman of Amsterdam; with burgomaster Johan Huydecoper van Maarsseveen founded Hortus Medicus in 1648 which later became the Amsterdam Botanical Garden in 1682; books: *Nederlantze Hesperides* [1676], helped publish *Hortus Indicus Malabaricus* [1678] by Hendrik Adrian RHEEDE (c.1636-1691), *Nederlandse Flora* [1683], and worked on *Horti Medici Amstelodamensis Rariorum* [1697-1701] with illustrations of East and West Indian plants Jan MONINCKX and his daughter Maria; died January 19, 1692 in Amsterdam; eponyms: *Commelinaceae* (R.Brown,1810) Day Flower Family; *Commelina* (Linnaeus,1753) Day Flowers; *C.dianthifolia* (Delile,1812) Birdbill Day Flower

COOLEY; no information available; eponyms: *Desmanthus cooleyi* [Eaton,1829] (Trelease, 1891) {=*Acacia cooleyi* (Eaton,1829)} Cooley Bundle Flower; named in 1829 by the American

botanist from New York, Amos EATON (1776-1842)

COULTER, John Merle (1851-1928); American botanist and educator; born November 20, 1851 in Ningpo, China; father died and mother returned to Hanover, Indiana, where her father lived; graduated Hanover College in Indiana (1870); botanist on United States (Hayden) Geological Survey in Yellowstone Park and Rocky Mountains and (1872-1873); received masters from Hanover College (1873); professor of natural science at Hanover College (1874); founder and editor of *Botanical Gazette* (1875-19??); professor of biology at Wabash College (1879); received PhD from Indiana University (1882); president of Indiana University (1891-1893); president of Lake Forest University (1893-1896); professor of botany and head of botany department at University of Chicago (1896-1924?); moved to Yonkers, New York (1825); organized Boyce Thompson Institute for Plant Research as dean and chief advisor (1925-1928); died December 23, 1928 in Yonkers, New York; books: *Manual of Botany of the Rocky Mountain Region* (1885 revised 1909), *Manual of Texan Botany* (1892-93); eponyms: *Asclepias coulteri* (A.Gray,1877) Coulter Milkweed; *Brickellia coulteri* (A.Gray,1852) Coulter Brickelbush, *Guaiacum coulteri* (A.Gray, 1854) Coulter Guaiacum; *Hibiscus coulteri* (Harvey ex A.Gray, 1852) Coulter Hibiscus; *Laennecia coulteri* [A.Gray,1868] (G.L.Nesom, 1990) {=*Conyza coulteri* (A.Gray,1868)} Coulter Horseweed, Coulter Fleabane; *Romneya coulteri* (Harvey,1845) Coulter Matilija Poppy; *Tetraclea coulteri* (A.Gray,1853)

DALE, Samuel (1659-1739); early English physician, botanist, plant collector and gardener; associate of John RAY, William SHERARD and Mark CATESBY; Catesby collected specimens in Virginia and sent them to Dale; Dale showed them to Sherard; Sherard and Dale helped Ray catalog and describe the specimens; books included a treatise on medicinal plants; also helped Sherard and Jacob Bobart the Younger complete third section of *Plantarum Historiae Universalis Oxoniensis* by Robert Morison; eponyms: *Dalea* (Linnaeus,1758) Prairie Clover, Indigo Bush; *D.albiflora* (A.Gray,1853) White Dalea; *D.candida* (Michaux ex Willdenow,1802) White Prairie Clover; *D.filiformis* (A.Gray,1853) Threadleaf Indigo Bush; *D.formosa* (Torrey, 1827) Indigo Bush; *D.leporina* [Aiton,1789] (Hemsley,1879) {=*Psoralea leporina* (Aiton, 1789.)} Foxtail Dalea; *D.purpurea* (Ventenat,1801) Purple Prairie Clover

DESCOURAIN, François (1658-1740); early French apothecary, pharmacist, physician, naturalist and botanist; friend of Bernard de Jussieu; eponyms: *Descourainia* (Webb+Berthelot, 1836) Tansy Mustard; *D.obtusa* [E.L.Greene,1904] (O.E.Swartz,1924) {=*Sophia obtusa* (E.L.Greene,1904)} Blunt Tansy Mustard

DEPPE, Ferdinand (1794-1861); German naturalist, explorer, entomologist, painter and botanist; younger brother of Wilhelm Deppe; traveled and collected plants and insects in Mexico for Berlin Museum with Count von Sack and William Bullock (1824-1826); returned to Germany (1827); again traveled to Mexico with Christian Julius Wilhelm SCHIEDE (1798-1836) a German physician and botanist (1828); planned to collect zoological and botanical specimens and sell them to museums and dealers in Europe; settled in eastern Mexico in Jalapa [Xalapa] (July 1828); collected in eastern Mexico, especially throughout state of Veracruz; made one short

trip to southern Texas; introduced several Mexican plants to Europe; sold collections to museums in Berlin and Vienna, but money insufficient to continue collecting; abandoned their effort (late 1830); Deppe collected briefly in California and Hawaii (1830) before returning to Germany; Schiede remained in Mexico (1830-1836); died at age 38 (1836); eponyms: *Juniperus deppeana* (Steudel, 1840) Alligator Juniper; *Kohleria deppeana* [Chamisso+ Schlechtendal, 1830] (Fritsch, 1894) {=*Gesneria deppeana* (Chamisso+Schlechtendal, 1830)} Deppe Tree Gloxinia; *Lycaste deppei* [G.Loddiges, 1830] (Lindley, 1843) {=*Maxillaria deppei* (G.Loddiges, 1830)} Deppe Greenhouse Orchid; *Oxalis deppei* (Loddiges, 1828) Deppe Wood Sorrel; *Vernonia deppeana* (Lessing, 1831) Deppe Ironweed

DESVAUX, Augustin [Augustine] Nicaise (1784-1856) French botanist and mineralogist; professor of botany at Angers (1816-1838); director of Angers Botanical Garden (1816-1838); editor of *Journal de Botanique, Appliquée à l'Agriculture, à la Pharmacie, à la Médecine et aux Arts*; book: *Flore de l'Anjou* [1827]; eponym: *Enneapogon desvauxii* (P.Beauvois, 1812) Spiked Pappus Grass

DOUGLAS, David (1798-1834); Scottish botanist; born June 25, 1798 in village of Scone northeast of Perth; son of a stonemason; attended Kinnoull School; apprentice gardener at estate of 3rd Earl of Mansfield at Scone Palace (c.1811-1818); attended college in Perth (1818); worked in Fife and studied botany and zoology books (1819-1820); worked at Glasgow Botanical Garden and attended botany lectures at University of Glasgow (1820-1822); met classmate John SCOULER (1804-1871); recommended by botany professor to Royal Horticultural Society of London; enlisted by R.H.S. to collect and explore in northwestern United States (1824); traveled as botanist with Scouler as medical officer on Hudson Bay Company brig *William and Ann*; sailed to Madeira, Brazil, Juan Fernandez Island and Galápagos Islands: first botanists to collect specimens in Galápagos Islands ten years before Darwin arrived in 1835; reached James Island (January 9th 1825); collected about forty samples but some later destroyed; reached Pacific coast of North America; explored and collected in Columbia River basin; visited Queen Charlotte Islands in British Columbia and Nootka Sound on Vancouver Island (1825); Scouler returned to England with ship (1825) but Douglas remained in America until 1827; brought back over 500 species from California and Columbia River; discovered *Pseudotsuga menziesii* (Douglas Fir); sent seeds to Sir William Jackson Hooker of R.H.S. (1826); scientific name honored Scottish botanist Archibald Menzies (1754-1842); common name accrued to himself; introduced about 240 new species to Britain, including Sitka spruce, western white pine, sugar pine, ponderosa pine, lodgepole pine, Monterey pine, grand fir and noble fir; these revitalized the British landscape and timber industry; also sent: wild currant, salal, lupin, penstemon and California poppy; kept a journal of travels in North America (1823-1827); later visited Hawaiian Islands and died under mysterious circumstances (July 12th 1834); apparently fell into a pit and crushed by bull that fell on top of him; Sir Joseph Dalton Hooker cited thirteen Galápagos plants gathered by Scouler and five by Douglas in paper on Darwin (1847); many Scouler and Douglas specimens presently located at John D. Prescott herbarium at Oxford University; eponyms: *Amsinckia douglasiana* (A.DeCandolle, 1846) Douglas Fiddleneck; *Artemisia douglasiana* (Besser ex W.J.Hooker, 1833) Douglas Wormwood,

Douglas Mugwort; *Baccharis douglasii* (DeCandolle,1836) Douglas Desert Broom, Douglas Seep Willow; *Chaenactis douglasii* [W.J.Hooker, 1833] (W.J.Hooker+Arnott,1839) {=*Hymenopappus douglasii* (W.J. Hooker,1833)} Douglas Pincushion Flower; *Cicuta douglasii* [DeCandolle,1830] (J.M.Coulter+Rose, 1900) {=*Sium douglasii* (DeCandolle,1830)} Douglas Water Hemlock; *Crataegus douglasii* (Lindley,1836) Douglas Hawthorn; *Iris douglasiana* (Herbert,1840) Douglas Iris; *Lesquerella douglasii* (S.Watson,1888) Douglas Bladderpod; *Limnanthes douglasii* (R.Brown,1833) Douglas Meadow Foam; *Micromeria douglasii* (Bentham, 1832) Douglas Yerba Buena; *Penstemon douglasii* (W.J.Hooker,1838) Douglas Beard Tongue; *Phlox douglasii* (W.J.Hooker,1838) Douglas Phlox; *Poa douglasii* (Nees,1838) Douglas BlueGrass; *Pogogyne douglasii* (Bentham,1834); *Polygonum douglasii* (E.L.Greene,1885) Douglas KnotWeed; *Quercus douglasii* (W.J.Hooker+Arnott,1840) Douglas Oak; *Sisyrinchium douglasii* (A.Dietrich,1833) Douglas Blue-Eyed Grass; *Spiraea douglasii* (W.J.Hooker,1832) Douglas SteepleBush

EATON, Amos (1776-1842); American botanist and educator; born May 17th 1776 in New Concord parish [now Chatham] New York; graduated from Williams College (1799); studied law in New York City; admitted to state bar (1802); worked as land agent and surveyor in Catskill, New York (1802-1810); imprisoned [falsely he claimed] on forgery charges and debt in a land dispute (1811-1815); adamantly maintained his innocence; studied sciences until released; taught young John TORREY (1796-1873) basic botany, mineralogy and chemistry (c.1812); studied science at Yale College under Benjamin Silliman and Eli Ives (1816); gave scientific lectures at Williams College (1817); published *Manual of Botany for the Northern States* first with descriptions in English (1817); moved to Troy-Albany area (1818); lectured at West Point and Castleton Medical Academy in Vermont (1818-1824); compiled textbooks in chemistry, zoology and geology; made geological and agricultural surveys along Erie Canal; developed teaching theory of learning by doing rather than by rote; co-founded with Stephen Van Rensselaer (his patron) the Rensselaer School (1824); taught sciences at Rensselaer (1824-1842); school renamed Rensselaer Institute (1835); died May 10th, 1842; grandson Daniel Cady EATON (1834-1895) professor of botany at Yale University; eponyms: *Cheilanthes eatonii* (W.J.Hooker +J.G. Baker,1867) Eaton Lip Fern; *Crataegus eatoniana* (Sargent,1906) Eaton Hawthorn; *Penstemon eatonii* (A.Gray,1872) Eaton Beardtongue

ECHEANDÍA, José María de (d.1871); Mexican soldier, engineer and politician; lieutenant-colonel with college of engineers in Mexico City; twice governor of Alta California: (1825–1831) preceded by Luis Antonio Argüello and succeeded by Manuel Victoria, and (1832–1833) preceded by Pío Pico and succeeded by José Figueroa; only governor to reside in San Diego; frail in health; promoted secularization of missions; earthquake damages increased demand for his engineering services; arrested by Santa Ana for political disturbances but released (1855); two step- daughters cared for him in old age; eponyms: *Echeandia flavescens* [Schultes +J.H.Schultes,1830] (Cruden,1981) {=*Anthericum flavescens* (Schultes+J.H.Schultes,1830)} Crag Lily

EMERSLEY, John D. (?-?); American botanical collector in southwestern United States; during the years 1889-1892 he corresponded frequently with George S. VASEY (1822-1893) grass

specialist and curator of the United States National Herbarium (1872–1893); eponyms: *Muhlenbergia emersleyi* (Vasey, 1892) Bull Grass, Emersley Muhly Grass

EMORY, William Hemsley (1811-1887); American army officer, surveyor, topographer and botanical explorer; born September 7th 1811 in Queen Anne's County, Maryland; graduated from West Point (1831); second lieutenant in Fourth Artillery (1831-1836); resigned to study civil engineering (1836); married Matilda Wilkins Bache of Philadelphia a great-granddaughter of Benjamin Franklin (1838); had three children; returned to army (1838); promoted to captain and major; specialized in cartography; served on Texas-Mexico border expedition to map Rio Grande river valley (1844-1846); chief topographical engineer in southwest and California during Mexican War (1846-1848); wrote *Notes of a Military Reconnaissance from Fort Leavenworth in Missouri to San Diego, California*, published by Congress in 1848 and especially well-known for its maps and descriptions of terrain in New Mexico, Arizona and Southern California; lieutenant-colonel in charge of United States and Mexican Boundary Survey (1848-1855) which set boundary between United States and Mexico according to Treaty of Guadalupe Hidalgo that ended the Mexican-American War; colonel in charge of Gadsden Purchase Survey (1854-1857); adjutant general under General Stephen W. Kearny (1857-1858); returned to Washington briefly (1858); three-volume work: *Report on the United States and Mexican Boundary Survey, made under the Direction of the Secretary of the Interior by William H. Emory* published (1857-1859); returned to Mexico under George Hughes as executive officer of Maryland volunteer regiment (1859-1860); stationed in Indian Territory [Oklahoma] as Civil War began (1861); withdrew from Confederates to Fort Leavenworth; brigade commander in Army of the Potomac (1862); transferred to Western Theater; commanded division in Port Hudson campaign; returned east as commander of Nineteenth Corps in Shenandoah Valley Campaign (1864); actions at Battle of Cedar Creek saved federal army until Maj. Gen. Philip Sheridan arrived; commanded federal troops in Louisiana, Arkansas and Mississippi, a dangerous Reconstruction assignment; removed from command for political reasons by Sheridan; retired in 1876; died December 1st 1887 in Washington, D.C.; eponyms: *Acacia emoryana* (Bentham, 1875) Emory Acacia; *Baccharis emoryi* (A.Gray, 1859) Emory Baccharis, Emory Desert Broom; *Carex emoryi* (Dewey, 1859) Emory Sedge; *Castela emoryi* [A.Gray, 1854] (Moran+Felger, 1968) {=*Holacantha emoryi* (A.Gray, 1854)} Chaparro Amargosa, Emory Crucifixion Thorn; *Cereus emoryi* (Engelmann, 1852) Emory Cereus Cactus; *Hyptis emoryi* (Torrey, 1860) Emory Desert Lavender; *Quercus emoryi* (Torrey, 1848) Emory Oak; *Sphaeralcea emoryi* (Torrey ex A.Gray, 1849) Emory Globe Mallow; also Emory Pass in the Black Range named in his honor

ENGELMANN, George [Georg] (1809-1884); German born American botanist and physician; born February 2nd 1809 in Frankfurt am Main to a schoolmaster; oldest of thirteen children; became interested in plants around age 15; studied at University of Heidelberg in Berlin; studied medicine at Würzburg University and received M.D. (1831); emigrated to United States to invest money in land for a wealthy uncle (1832); visited Thomas NUTTALL in Philadelphia; traveled to St. Louis, Missouri; spent several years on a farm in adjacent Illinois (1832-1834); settled in St. Louis and established medical practice (1835-1839); visited Germany, married Dorothea Horstmann and returned to America (1840); expanded medical practice (1840-1845); traveled to

northern Mexico and southwestern United States to study cacti (1846); published – *Memoir of a Tour to Northern Mexico* (1848); founded St. Louis Academy of Sciences and elected first president (1848?); member of Pacific Railroad Survey (1853-1854) along 35th parallel with John Milton BIGELOW (1804-1878) under command of Lieutenant A. W. WHIPPLE (1816-1863); sent specimens to Asa GRAY (1810-1888) at Harvard; published – *Description of Cactaceae* co-authored by Bigelow (1856); encouraged St. Louis businessman Henry Shaw to develop private gardens into the Missouri Botanical Garden for scientific and public use (1859); worked there and studied western North America flora, especially Rocky Mountains and northern Mexico; demonstrated that some American grape vines were immune to plant lice *Phylloxera* which devastated European vineyards after 1863; died February 4th 1884; collections, library and drawings at Missouri Botanical Gardens; son George Julius Engelmann became noted gynecologist; eponyms: *Crataegus engelmanni* (Sargent,1901) Engelmann Hawthorn; *Cyperus engelmanni* (Steudel,1855) Engelmann Sedge; *Echinocereus engelmannii* [Parry ex Engelmann, 1852] (Lemaire,1868) {=*Cereus engelmanni* (Parry ex Engelmann,1852)} Engelmann Hedgehog Cactus; *Eleocharis engelmanni* (Steudel,1855) Engelmann Spike Rush; *Isoetes engelmanni* (A.Braun, 1846) Engelmann Quillwort; *Ophioglossum engelmanni* (Prantl,1883) Engelmann AddersTongue; *Opuntia engelmannii* (Salm-Dyck ex Engelmann,1850) Engelmann Prickly Pear; *Quercus engelmannii* (E.L. Greene,1889) Engelmann Oak; *Picea engelmannii* (Parry ex Engelmann,1863) Engelmann Spruce; *Pinus engelmannii* (Carrière,1854) Apache Pine, Engelmann Pine; *Sagittaria engelmanniana* (J.G.Smith, 1894) Engelmann Arrowhead

ESCHSCHOLTZ, Johann Friedrich von (1793-1831); Russian born German physician, botanist, zoologist, entomologist and explorer; born November 1st 1793 in Dorpat (Tartu) in Russian Empire [now Estonia]; studied medicine at Dorpat University; surgeon and naturalist on Russian (Romanzoff) circumnavigational expedition of ship *Rurik* (1815-1818) accompanied by botanist and friend Ludolf Karl Adelbert von CHAMISSO (1781-1838) and commanded by Otto von KOTZEBUE (1787-1846); collected plants and insects in Brazil, Chile, California (1816), Pacific Islands, Bering Strait, Kamchatka and Aleutian Islands; Chamisso kept botanical specimens and named the California poppy in his honor; became professor of anatomy (1819) and director of zoology at Dorpat (1822); insect specimens published in Berlin journal *Entomographien* (1822); botanist on circumnavigational voyage of ship *Predpriaetie* [Enterprise] also under Kotzebue (1823-1826); visited San Francisco and Sacramento River (1824); collected *Coleoptera* (beetles) in tropics, Alaska and California; first naturalist to describe acorn worm (*Balanoglossus*) found in Marshall Islands (1825); became professor of anatomy at Dorpat (1828); visited French coleopterist Pierre François Marie Auguste Dejean; compared specimens to Dejean's collection to decide which were new; binomial names and descriptions published by Dejean after his death and attributed to him, but proper nomenclature rules later excluded him; books: *System der Akalephen* (1829), *Zoologischer Atlas* (1829-1833); died May 19th 1831; insect collections in Moscow, Tartu and Helsinki museums; eponyms: *Eschscholzia* (Chamisso, 1820) California Poppy; *E.californica* (Chamisso,1820); Kotzebue also named Eschscholtz Atoll in Marshall Islands for him; renamed Bikini Atoll (1946); site of first H-Bomb test November 1st 1952

EUPATOR, Mithridates VI [“the great”] (132-63 B.C.); king of ancient Pontus (120-63 B.C.) located in Asia Minor; believed to have discovered how to produce immunity against poisons by taking the poison itself in small gradually increasing doses; according to Pliny the Elder, he treated liver complaints with medicinal herbs; writings of his herbalist-physician Krateuas included by DIOSCORIDES in *De Materia Medica* which described over 500 medicinal plants; epithet Eupator literally meant: born of a noble father, derived from the Greek prefix: eu- (ευ-) = good, well, noble, correct or beneficial, and the Latin: pater = a father; eponyms: *Eupatorium* (Linnaeus,1753) Thoroughwort, Boneset, etc.; *E.perfoliatum* (Linnaeus,1753) Boneset, Joe-Pye-Weed, *E.purpureum* (Linnaeus,1753) Gravelroot, Queen of the Meadow, *E.cannabinum* (Linnaeus,1753) Hemp Agrimony; *Brickellia eupatorioides* [Linnaeus,1763] (Shinners,1971) {=*Kuhnia eupatorioides* (Linnaeus, 1763)} False Boneset, BrickelBush

FALLUGI, Virgilio (1627-1707); Italian botanist, monk and abbot at Vallombrosa monastery about 20 miles from Florence; originally named Filippo Fallugi; name also spelled: FALUGI and FALLU’GIA; respected rhetorician, philosopher, theologian and poet; offered position of botany professor at University of Padua but declined; monastery founded in 11th century by Saint Giovanni Gualberto, Italy's patron saint of forests; destroyed by Napoleon in 1808 and rebuilt in 1815; closed by Italian government in 1866; a few monks remain at main church; visited by John Milton, Mary Shelley, William Wordsworth, Robert and Elizabeth Barrett Browning; eponyms: *Fallugia* (Endlicher,1840) Apache Plume; *F.paradoxa* [D.Don,1825] (Endlicher in Torrey,1848) {=*Sieversia paradoxa* (D.Don,1825)} Apache Plume

FEE, Antoine Laurent Apollinaire (1789-1874); French botanist, pteridologist (ferns), and cryptogamist (lichens and fungi); born November 7th 1789 in Ardentes; medical orderly in Napoleon's army in Spain (1807-1809); returned to Paris (1809); entered apothecary school in Strasbourg (1815); returned to Paris as apothecary (1823); founded pharmaceutical association of Paris (1824); appointed instructor at teaching hospital in Lille (1825); published works on lichens impressed botanist Christian Hendrik Persoon (1755-1837); replaced Christian Gottfried Nestler (1778-1832) as instructor at teaching hospital in Strasbourg (1832); promoted to doctor of medicine and professor of botany at Strasbourg (May 14th 1833); remained in Strasbourg (1833-1870); during Franco-Prussian war (1870-1871), Prussians captured Strasbourg, and he moved to Paris; elected president of Société Botanique de France (1874); books: *Essai sur les Cryptogames de écorces exotiques officinales* (seven volumes) [1824-1825]; *Mémoires sur les Familles des Fougères* (eleven volumes) [1844-1866]; died May 21st 1874 in Paris; eponym: *Cheilanthes feei* (T.Moore,1857) Slender Lip Fern, Fee Lip Fern

FENDLER, August [Augustus] (1813-1883); German born American botanist; born in Gumbinnen, Prussia; emigrated to United States (1836); worked briefly at a Philadelphia tanyard (c.1837), a New York lamp factory (c.1838) and a St. Louis gas works (c.1839); traveled to New Orleans and Texas (1839); taught school in Illinois (1840); met George ENGELMANN (1809-1884) in St. Louis (1844); learned about need for dried pressed plant specimens and practiced collecting in St. Louis area for Engelmann with Asa GRAY (1810-1888) as co-sponsor; traveled briefly with James William ABERT (1820-1897) along Canadian River to eastern New

Mexico (1845); collected near Santa Fe (1846-1847); first botanist to collect in southwestern United States; also explored and collected briefly in western Texas, southern New Mexico and adjacent northern Mexico; returned to St. Louis (1848); flood during new expedition destroyed all gear, notebooks and specimens (1849); returned to St. Louis but all personal possessions had been destroyed by fire near Mississippi River waterfront; traveled to Panama (c.1851-1854) and Venezuela (c.1855-1859); sent some tropical specimens to Gray; farmed in Missouri (c. 1860-1865); briefly acted as curator of Harvard University herbarium under Gray (c.1866); briefly returned to Prussia (c.1868); stopped collecting and moved to Wilmington, Delaware; wrote a speculative book on physics – *The Mechanism of the Universe* (1874); greatly disappointed by Gray's dismayed reaction and book's generally poor reception; retired to Trinidad (1875-1883); eponyms: *Fendlera* (Engelmann+A.Gray,1852) Fendler Bush; *F.rupicola* (Engelmann+A.Gray,1852) Rock Fendler Bush; *Arenaria fendleri* (A.Gray,1849) Sandwort; *Argyrochosma fendleri* [Kunze,1851] (Windham,1987) {=*Notholaena fendleri* (Kunze,1851)} Fendler Cloak Fern; *Aristida fendleriana* (Steudel, 1855) Fendler Three-Awn Grass; *Aster fendleri* (A.Gray,1849) {=*Symphyotrichum fendleri* [A.Gray,1849] (G.L.Nesom,1995)} Fendler Aster; *Berberis fendleri* (A.Gray,1849) Fendler Barberry; *Boechea fendleri* [S.Watson,1895] (W.A.Weber,1982) {=*Arabis fendleri* [S. Watson,1895] (E.L.Greene,1897); =*Arabis holboellii* var. *fendleri* (S.Watson,1895)} Fendler Rock Cress; *Brickellia fendleri* (A.Gray, 1849) Fendler Brickel Bush; *Ceanothus fendleri* (A.Gray,1849) Fendler Redroot; *Chamaesyce fendleri* [Torrey +A.Gray,1856] (Small, 1903) {=*Euphorbia fendleri* (Torrey+A.Gray,1856)} Fendler Ground Spurge; *Cheilanthes fendleri* (W.J.Hooker,1852) Fendler Lip Fern; *Cryptantha fendleri* [A.Gray, 1885] (E.L.Greene,1887) {=*Krynitzkia fendleri* (A.Gray,1885)} Fendler Cat Eye; *Cymopterus fendleri* (A.Gray,1849) Fendler Biscuit Root, *Cyperus fendlerianus* (Boeckeler,1868) Fendler Flat Sedge; *Echinocereus fendleri* [Engelmann,1849] (Sencke ex J.N.Haage,1860) {=*Cereus fendleri* (Engelmann,1849)} Fendler Hedgehog Cactus; *Galium fendleri* (A.Gray,1849) Fendler Cleavers, Fendler Bedstraw; *Hieracium fendleri* (Schultz-Bipontinus,1861) Fendler Hawkweed; *Hydrophyllum fendleri* [A.Gray,1875] (A.Heller,1897) {=*Hydrophyllum occidentale* var. *fendleri* (A.Gray,1875)} Fendler WaterLeaf; *Lesquerella fendleri* [A.Gray,1849] (S.Watson,1888) {=*Vesicaria fendleri* (A.Gray,1849); =*Physaria fendleri* [A.Gray,1849] (O'Kane+ Al-Shehbaz, 2002)} Fendler Bladderpod; *Malacothrix fendleri* (A.Gray,1853) Fendler Desert Dandelion; *Noccaea fendleri* [A.Gray,1853] (Holub,1998) {=*Thlaspi fendleri* (A.Gray,1853)} Fendler Wild Candytuff; *Oxypolis fendleri* [A.Gray,1849] (A. Heller,1897) {=*Archemora fendleri* (A.Gray, 1849)} Fendler Owl Clover; *Penstemon fendleri* (Torrey+A.Gray,1857) Fendler Beard Tongue; *Physalis fendleri* (A.Gray,1874) Fendler Ground Cherry; *Poa fendleriana* [Steudel,1854] (Vasey, 1893) {=*Eragrostis fendleriana* (Steudel,1854)} Fendler Blue Grass; *Rosa woodsii* var. *fendleri* [Crépin,1876] (Rydberg,1895) {=*Rosa fendleri* (Crépin,1876)} Fendler Rose; *Solanum fendleri* (A.Gray, 1856) Fendler Nightshade; *Sphaeralcea fendleri* (A.Gray,1852); Fendler Globe Mallow; *Thalictrum fendleri* (Engelmann ex A.Gray, 1849) Fendler Meadow Rue

FORESTIER, Charles le (d.1820); French physician and botanist from Saint-Quentin; Jean Louis Marie POIRET's first instructor in botany; no other information available; eponyms: *Forestiera* (Poiret,1810) Wild Olive, Desert Olive; *F.pubescens* (Nuttall, [1835],1837) New Mexico Olive

FOUQUIER, P. E. (1776-1850); French physician, medical consultant and professor at Paris; no other information available; eponyms: *Fouquieria* (Humboldt+Bonpland+Kunth,1823) Ocotillo, Candlewood; *F.splendens* (Engelmann,1848) Ocotillo

FRANSERI, Antonio (18th century); Spanish physician and botanist; contemporary of Spanish botanist Antonio Jose CAVANILLES (1745-1804); no other information available; eponyms: *Franseria* (Cavanilles,1793); *Artemisia franserioides* (E.L.Greene, 1883) Ragweed Sagebrush

FRASER, John (1750-1811); Scottish nurseryman, plant collector and botanist; born in Tomnacross [Tomnacloch] the Aird, in Inverness Shire near Inverness; son of a respected farmer; moved to London (c.1770); worked as linen draper and haberdasher but suffered from consumption; accompanied a friend named Admiral Campbell to Newfoundland hoping slow the disease; explored there and regained health (1780-1784); traveled and collected in newly formed United States, especially in southern Appalachian mountains (1785-1787); met the American botanist from Charleston, South Carolina, Thomas WALTER (1740-1789) author of *Flora Caroliniana*; returned to London with collections and published Walter's book (1788); returned to United States on second expedition (1788-1789); met French botanist and collector Andre MICHAUX (1746-1802); returned to England with about 220 new plants including species of *Rhododendron*, *Andromeda*, *Azalea*, *Kalmia*, *Vaccinium*, *Magnolia*, *Menziesia*, *Quercus*, *Pinus*, *Phlox* and *Oenothera*; established a twelve acre nursery in Chelsea near London to propagate and distribute plants; returned to United States with his son on a third expedition (1789-1792) and alone on a fourth expedition (1793-1796); traveled in Allegheny Mountains, visited Indian settlements and suffered privations; returned to England (1796); sent some specimens to English botanist William AITON (1731-1793) head gardener at Kew Gardens, and to English botanist Sir James Edward SMITH (1759-1828) president of Linnaean Society; visited Russia (1796) with large collection of plants, including black and white Tartarian cherries, and sold plants privately to Empress Catherine; after her death, returned to Russia and commissioned by Empress Maria to supply further collections to Imperial Gardens at Gatschina and Perlorskoe; appointed royal botanical collector for Russia by ukase issued by Emperor Paul and Empress Maria (1798); fifth expedition to United States (1799-1802) with his son John; explored in Bald Mountains near Tennessee-North Carolina border and discovered *Rhododendron Catawbiense*; visited Cuba (1800-1802); war between Spain and Great Britain obliged travel as American citizens; shipwrecked for six days on coral reef forty miles from land and eighty from Havana; rescued by Spanish boat; American consul helped them travel overland to Havana; met with German and French botanical explorers Humboldt and Bonpland; collected in Cuban mountains; discovered *Jatropha pandurafolia*; returned to United States (1802); while headed to England, boat leaked and forced to land at New Providence Island in Bahamas (1802); Emperor Paul died and Emperor Alexander refused to honor former agreements; dowager Empress Maria privately paid off accounts via a friend and gave Fraser a diamond ring; sixth expedition to United States (1804-1806); seventh expedition to United States (1807-1810) again with his son and again visited Cuba; fell from a horse near Charleston, broke several ribs and never fully recovered; returned to England (1810); died April 26th 1811 at Sloane Square, Chelsea, near London; the

Walter herbarium and Fraser collections presented to Linnaean Society by his son (c.1820); eponyms: *Fraseria* (Walter,1788) {=*Swertia* (Linnaeus, 1753) Green Gentian; *F.albomarginata* (S.Watson,1871) White-Fringed Green Gentian; *F.paniculata* (Torrey,1857) Paniced Green Gentian; *F.speciosa* (Douglas ex Grisebach,1838) {=*Swertia radiata* [Kellogg,1873?] (O.Kuntze, 1893), =*Tessaranthium radiatum* (Kellogg,1873?)} Showy Green Gentian, Deer's Ears; *Abies fraseri* [Pursh,1814] (Poiret,1817) {=*Pinus fraseri* (Pursh,1814)} Fraser Fir; *Acalypha gracilens* (A.Gray,1848) var. *fraseri* [Mueller-Argovensis,1865] (Weatherby, 1927) {=*Acalypha virginica* (Linnaeus,1753) var. *fraseri* (Mueller-Argovensis,1865)} Fraser CopperLeaf; *Cymophyllus fraseri* [Andrews,1811] (Mackenzie,1913) {=*Carex fraseri* (Andrews,1811)} Fraser Sedge; *Leucopogon fraseri* (A.Cunningham ex DeCandolle,1839) Fraser White Beard; *Magnolia fraseri* (Walter,1788) Fraser Magnolia; *Oenothera tetragona* (Roth,1800) var. *fraseri* [Pursh,1814] (Munz,1937) {=*Oenothera fraseri* (Pursh,1814)} Fraser Evening Primrose; *Peperomia fraseri* (C.DeCandolle,1866) Fraser Peperomia

FRÉMONT, Major-General John Charles (1813-1890); temperamental American army officer, explorer, plant collector and politician; studied mathematics, astronomy, botany, geology and cartography; teacher and surveyor (1833-1837); commissioned second lieutenant of topographical engineers (1838); assigned chief assistant to French scientist Joseph N. Nicollet for survey between Missouri and Mississippi Rivers who tutored him on expedition logistics and gathering scientific information (1839); eloped with Jessie Benton, daughter influential Missouri Senator Thomas Hart Benton (1841); Benton initially angered but later reconciled when expeditions helped expand American territory; instructed in plant collecting by George Engelmann (1841); first expedition mapped Oregon Trail through Rockies (1842); report (partly written by his wife) published by Congress and appeared in major newspapers (1843); routes and maps to Great Salt Lake influenced Mormons to settle there; writings strongly abetted westward expansion and belief in Manifest Destiny; corresponded frequently (1842-1850) with John TORREY (1796-1873); Torrey and Asa GRAY (1810-1888) described collections; second expedition (1843-1844) through Rockies, Great Basin and Sierra Nevada lost some samples to a flood and a mule falling off a cliff, but Sierra Nevada plants excited botanists; helped take California away from Mexico (1844-1846); appointed Governor of California Territory (1846); court martialled, convicted and dismissed from military for refusing to obey an order to abdicate Governorship (1847); third expedition (1847-1848) collected over a thousand specimens; fourth expedition (1849-1851) lost some collections to rain and snow in Colorado San Juan Mountains and ten men died; during fifth expedition (1853-1854) Fremont and Torrey ceased correspondence; five expeditions covered 20,000 miles, mapped huge areas and inspired waves of pioneers; as a Democrat, elected one of first two Senators from California (1850); served short six month term, but failed in re-election bid; made a fortune in Gold Rush but eventually lost everything when protracted court battles over land claims and payments sided with former partners; nominated as first presidential candidate of newly formed Republican Party (1856); outspoken proponent of freeing slaves; southern states threatened to secede if elected; lost to James Buchanan (1856); due to the Civil War, Lincoln re-instated Fremont and promoted him to Major-General (1861); in Missouri, he confiscated southern land, freed slaves and declared martial law; he refused to obey Lincoln's order rescinding these unauthorized actions and was

removed from duty after six months; due to Republican pressure Lincoln reinstated him again, but he lost several Civil War battles; when demoted he angrily resigned; ran for President again and lost (1864); convicted by a French court in a case involving a Transcontinental Railroad swindle (1873); elected territorial governor of Arizona until removed from office by public protest over avoiding duties (1878-1881); eponyms: *Fremontia* (Torrey,1843) Flannel Bush, *Fremontodendron* (Coville,1893) Flannel Bush; *Clematis fremontii* (S.Watson,1875) Fremont Clematis; *Dalea fremontii* (Torrey ex A.Gray,1854) Fremont Dalea; *Garrya fremontii* (Torrey, 1857) Fremont Silk Tassel; *Gentiana fremontii* (Torrey,1843) Fremont Gentian; *Geranium fremontii* (Torrey ex A.Gray,1849) Fremont Cranesbill; *Berberis fremontii* (Torrey,1859) {=*Mahonia fremontii* [Torrey,1859] (Fedde,1901)} Fremont Barberry, Fremont Oregon Grape; *Mimulus fremontii* [Bentham,1846] (A.Gray,1876) {=*Eunanus fremontii* (Bentham,1846)} Fremont Monkey Flower; *Populus fremontii* (S.Watson,1875) Fremont Poplar {=*Populus deltoides* var. *fremontii* [S.Watson,1875] (Cronquist,2005)} *Senecio fremontii* (Torrey+ A.Gray, 1843) Fremont Ragwort

FROELICH, Joseph Aloys von (1766-1841); German physician, botanist and entomologist; name also spelled Josef Alois von Frölich and Josephus Aloysius Froelich; born in Allgäuer Ort Oberdorf; studied medicine and botany at Ingolstadt and Vienna; received doctorate at Erlangen with dissertation on genus *Gentiana* [gentian] (1796); contributed to the *Prodromus* of DeCandolle; published papers on genera *Crepis* [hawkbeard], *Hieracium* [hawkweed] and *Sonchus* [sow thistle] (1838); died in Ellwangen (Jagst); eponyms: *Froelichia* (Moench,1794) Snake Cotton; *F.gracilis* [W.J.Hooker,1840] (Moquin-Tandon,1849) {=*Oplotheca gracilis* (W.J.Hooker, 1840)} Slender Snake Cotton

GAILLARD, M. Gaillard de Charentonneau; 18th century French magistrate, amateur botanist and botanical patron; studied *Asteraceae* [≡*Compositae*] Aster-Composite Family; no other information available; eponyms: *Gaillardia* (Fougeroux,1788) Blanket Flower; *G.pinnatifida* (Torrey,1827); *G.pulchella* (Fougeroux,1788)

GAMBEL, William (c.1821-1849); American naturalist, physician, plant collector and ornithologist from Philadelphia; collected with Thomas NUTTALL in North Carolina (1838); collected for Nuttall on Santa Fe Trail, Old Spanish Trail and along California coast (1841-1842); joined United States Navy as secretary and visited California mission stations (1842-1843); arrived in Philadelphia (1845); qualified as physician (1848); died of typhoid fever crossing the Sierra Nevada mountains in December of 1849 at about age 28; eponyms: *Quercus gambelii* (Nuttall,1848) Gambel Oak; also collected: *Callipepla gambelii* (Gambel Quail); *Parus gambeli* (Mountain Chickadee); *Picoides nuttallii* (Nuttall Woodpecker); and *Gambelia copei* (Cope Leopard Lizard) species named for Edward Drinker Cope an American herpetologist and paleontologist

GARRY, Nicholas (c.1782-1856); English fur trader; son of Nicholas Langley (d.1783) and Isabella Garry; raised by Thomas Langley, an uncle who became a board director of the Hudson Bay Company (1807); became a board director himself in (1817); went to Canada and supervised

amalgamation of Hudson Bay Company with Northwest Company (1821); visited trading posts in Manitoba and northern Ontario to explain the merger to traders and native peoples (1822); deputy governor of the Hudson Bay Company (1822-1835); became mentally unstable (1835); affairs administered by a master of chancery (1839-1856); died in Claygate, Surrey, England (1856); journals published in *Transactions of the Royal Society of Canada* (1900); Garry was a friend of David DOUGLAS (c.1798-1834) botanist and explorer who described and named several plants for him; eponyms: *Garryaceae* (Lindley,1834) Silk Tassel Family; *Garrya* (Douglas ex Lindley,1834) Silk Tassel; *Garrya wrightii* (Torrey,1857) Wright Silk Tassel; Fort Garry in Winnipeg also named for him

GILLIES, John (1747-1836); Scottish physician, historian, classical scholar and amateur botanist; attended University of Glasgow; taught Greek, published history texts and translations, especially of Aristotle; succeeded William Robertson (1721-1793) as Historiographer Royal of Scotland (1793); books: *Orations of Lysias and Isocrates* (1778); *Ethics and Politics* (1786), *History of Ancient Greece* (1788), *Frederic II of Prussia* (1789), *History of the World from Alexander to Augustus* (1807), *Rhetoric* (1823); resided for several years in Buenos Aires (dates uncertain) and collected in Argentina and Chile; plant descriptions of his collections published by the English botanist Sir William Jackson HOOKER (1785-1865); eponyms: *Caesalpinia gilliesii* [Wallich ex W.J.Hooker,1830] (D.Dietrich,1840) {=*Poinciana gilliesii* (Wallich ex W.J.Hooker, 1830)} Bird of Paradise; see also: CAESALPINI

GOODDING, Leslie Newton (1880-1967); American botanist, plant collector, plant pathologist and conservationist; studied at University of Montana; collected as student in Yellowstone National Park and Teton Mountains with Dr. Aven Nelson, founder of Rocky Mountain Herbarium at University of Wyoming; traveled in Wyoming, Colorado, New Mexico, Arizona, Nevada and Mexico; first to explore in southern Arizona; collected specimens for sale and for herbaria; discovered many undescribed species including rare Goodding Ash; high school teacher at Benson, Bisbee, and Normal School in Flagstaff (later Northern Arizona University); worked at Arizona Soil Conservation Service; studied soil erosion; helped preserve southern Arizona biodiversity; 545 acre Goodding Research Area created posthumously by U.S. Forest Service in Sycamore Canyon; eponyms: *Allium gooddingii* (M.Ownbey,1949) Goodding Onion; *Fraxinus gooddingii* (Little,1952) Goodding Ash; *Haplopappus gooddingii* [A.Nelson,1904] (Munz+I.M.Johnston,1922) (= *Sideranthus gooddingii* (A.Nelson,1904)} Goodding Haplopappus; *Salix gooddingii* (C.R.Ball,1905) Goodding Willow; *Verbena gooddingii* (Briquet, 1907) Goodding Vervain

GOODYER, John (1592-1664); early English herbalist and botanist; born in Alton, grew up in Hampshire, apparently received a good education, but site unknown; worked as estate manager for Sir Thomas Bilson at West Mapledurham House near Buriton [demolished in 1829]; agent for Lancelot Andrewes, Bishop of Winchester; resided in Droxford village until married (1632); moved to Petersfield; house on The Spain still stands; had no children; developed an interest in botany; studied British elms; became an herbalist of great repute; believed to have introduced Jerusalem Artichoke to English cuisine; revised John Gerard's Herbal with Thomas Johnson;

translated *De Materia Medica* by Dioscorides from Latin into English; during the English Civil War (1643) Ralph Hopton a senior Royalist commander ordered troops to defend and protect the Goodyer estate; died in 1664 in Buriton; stained glass window at St Mary's church shows Goodyer coat of arms, and body buried in unmarked grave near his wife; part of estate passed to a nephew, Reverend Edmund Yalden; remains established a charity (still active) to help the poor of Weston, a hamlet near Buriton; books and herbarium sheets stored at Magdalen College, Oxford University; eponyms: *Goodyera* (R.Brown,1813) Rattlesnake Plantain; *G.oblongifolia* [Willdenow,1805] (R.Brown,1813) {=*Neottia pubescens* (Willdenow,1805) Downy Rattlesnake Plantain

GRAHAM, James Duncan (1799-1865); American army officer and topographical engineer; graduated from West Point (1817); member of Major Long's exploratory trip to Colorado (1819-1821); conducted railroad surveys in Virginia, Alabama and Florida 1831-1832); astronomer on Texas Republic boundary survey (1839-1840); surveyed northeast boundary of the United States from Maine to New York (1840-1843); astronomer on boundary survey between United States and Canada (1845); astronomer during Mexican war (1846-1848); confirmed Mason-Dixon survey line to settled boundary disputes between Maryland, Pennsylvania and Delaware (1850); astronomer on boundary survey after Mexican War under Treaty of Guadalupe Hidalgo (1850-1851); made improvements in Great Lakes harbors (1851-1861); discovered lunar tide (1858-1859); engineered Boston harbor sea-walls (1863); eponyms: *Desmodium grahamii* (A.Gray,1853) Graham Tick Trefoil; Mt. Graham (10,720 feet) highest peak in Pinaleno Mountains in southeastern Arizona near Safford named for him in 1846 by his friend Lt. William EMORY; Graham County, Arizona, also named for him

GRAY, Asa (1810-1888); noted American botanist and renowned systematist; born November 18th 1810 in Sauquoit, New York; became physician (1831); renounced medicine for botany; became first faculty member at University of Michigan (1838); visited European botanists (1838-1839); bought books for University of Michigan; acted as bridge between European and relatively unknown North American botany; studied with American botanist John TORREY (1796-1873); co-authored with him *Flora of North America* (1838-1842) which helped unify North American taxonomy; remained life-long friends and collaborators; appointed professor of natural history and botany at Harvard University (1842); held this post for 31 years until retiring from teaching (1873); corresponded with, befriended, trained, supported, mentored and received material from many noteworthy plant collectors and botanists including George ENGELMANN (1809-1884), Major-General John Charles FRÉMONT (1813-1890), August FENDLER (1813-1883), John Gill LEMMON (1832-1908), Sereno WATSON (1826-1892), Joseph Trimble ROTHROCK (1839-1922) and Charles WRIGHT (1811-1885); described over 7,000 plants; *Manual of the Botany of the Northern United States* [Gray's Manual] published (1847-1848) illustrated by Isaac Sprague with seven subsequent editions; still available at Amazon.com; created and developed Harvard University botany department, botanical garden [Arnold Arboreum] and herbarium [now Gray Herbarium] (1842-1864); donated 200,000 plant specimens and 2,200 books to Harvard (1864); herbarium now has 63,000 books and 2,000,000 plant specimens; corresponded with and influenced Charles Darwin; provided information helpful to the writing of *Origin of Species* (published 1859); strong supporter of evolution in

United States; from a letter written to Darwin: *I am free to say that I never learnt so much from one book as I have from yours* (January 23rd 1860); essay collection *Darwiniana* advocated reconciliation between evolution and orthodox Protestant Christianity which many people considered incompatible; proponent of natural system of classification based on entire plant structures and geographical ranges, rather than single aspect like Linnaean flower-based sexual system; visited Colorado briefly with Charles Christopher PARRY (1823-1890), Edward Lee GREENE (1843-1915) and eighteen others (1872); Parry dedicated Gray's Peak to him while they climbed it; re-visited Colorado (1877) with Sir Joseph Dalton HOOKER director of Royal Botanic Garden at Kew and the Hayden Survey; co-authored with Hooker in U.S. Geological Survey Bulletin: *Vegetation of Rocky Mountain Region and Comparison with Other Parts of the World* (1881) an important study in comparative botany; founding member of the American National Academy of Science; died January 30th 1888 in Cambridge, Massachusetts; buried in Mount Auburn Cemetery; most respected American botanist of 19th century; Asa Gray Award established in 1984 by American Society of Plant Taxonomists honors a living botanist for career achievement eponyms: *Angelica grayi* [J.M.Coulter+Rose,1888] (J.M.Coulter+Rose,1900) {=*Selinum grayi* (J.M.Coulter+Rose,1888)} Gray's Angelica; *Carex grayi* (J.Carey,1847) Gray's Sedge; *Carex livida* [Wallenberg,1803] (Willdenow,1805) var. *grayana* [Dewey, 1834] (Fernald, 1926) {=*Carex grayana* (Dewey,1834)} Gray's Sedge; *Crataegus flabellata* [Bosc ex Spach, 1834] (Rydberg,1900) var. *grayana* [Eggleston,1908] (E.J.Palmer,1946) {=*Crataegus grayana* (Eggleston,1908)} Gray's Hawthorn; *Cyperus grayi* (Torrey,1836) Gray's Flat-Sedge; *Festuca grayi* [Abrams,1904] (Piper,1906) {=*Festuca microstachys* subsp. *grayi* (Abrams,1904)} Gray's Fescue Grass; *Heuchera richardsonii* (R.Brown,1823) var. *grayana* (Rosendahl+Butters+Lakela,1933) Gray's Alum Root; *Leucothoe grayana* (Maximowicz,1883) Gray's Sierra Laurel; *Lilium grayi* (S.Watson, 1879) Gray's Lily; *Lomatium grayi* [J.M.Coulter+Rose,1888] (J.M.Coulter+Rose,1900) {=*Peucedanum grayi* (J.M.Coulter+Rose,1888)} Gray's Biscuit Root; *Phaseolus grayanus* (Wooton+Standley,1913) Gray's Common Bean; *Rhynchospora grayi* (Kunth,1837) Gray's Beaked Rush; *Salix X grayi* (C.K.Schneider,[1921],1922) Gray's Willow; *Spiranthes tuberosa* (Rafinesque,1833) var. *grayi* [Ames,1904] (Fernald,1946) {=*Spiranthes grayi* (Ames,1904) Gray's Lady's Tresses; *Zaluzania grayana* (B.L.Robinson+Greenman,1899) {=*Gymnolomia triloba* (A.Gray,1882)} Gray's Zaluzania

GREENE, Edward Lee (1843-1915); American botanist, plant collector and taxonomist; born August 20th 1843; contacted George ENGELMANN (1809-1884) and Asa GRAY (1810-1888) in 1870 who encouraged him to collect in Colorado (1870-1873); met Gray and Charles Christopher PARRY (1823-1890) to climb Gray's Peak in Colorado (1872); ordained an Episcopal priest at Jarvis Hall Seminary in Golden, Colorado west of Denver (1873); collected, taught and preached in Colorado, California and New Mexico (1873-1881); converted and became Catholic priest (c.1880); began to describe his own collections and those of other western botanists rather than sending them to Gray; wrote hundreds of articles on western flora; lectured at University of California at Berkeley (1882-1885); became its first professor of botany (1885-1895); became curator of California Academy of Sciences herbarium (1891); became chair of botany department at Berkeley (c.1892); moved to Washington, D.C. and taught as

professor of botany at Catholic University of America (1895–1904); became an associate in botany at Smithsonian Institute (1904–1915); wrote *Landmarks of Botanical History* [volume 1 published by Smithsonian in 1909, and volume 2 edited by Frank N. Egerton and published by Hunt Institute and Stanford University Press in 1983 with reprint of volume 1]; had strong views, many friends and many detractors; espoused absolute priority in nomenclature; became taxonomic splitter who proposed about 3000 new specific names; edited botanical journal *Pittonia*; died November 10th 1915; papers at Notre Dame Archives; eponyms: *Brickellia greenei* (A. Gray, 1877) Greene Brickle Bush; *Chrysothamnus greenei* [A. Gray, 1876] (E.L. Greene, 1895) {=*Bigelowia greenei* (A. Gray, 1876)} Greene Rabbitbrush; *Lotus greenei* (Ottley, 1939) Greene Lotus; *Mirabilis greenei* (S. Watson, 1876) Greene Four O'clock; *Oldenlandia greenei* (A. Gray, 1883) Greene Oldenlandia; *Orcuttia greenei* (Vasey, 1891) Greene Orcutt Grass; *Viola greenei* (House, 1897) Greene Violet

GREGG, Josiah [John] (1806-1850) American physician, botanist, explorer, plant collector and cactologist; born in Overton County, Tennessee; traveled in Texas up Red River valley (summer 1841) and from Galveston to Austin to Nacogdoches to Arkansas (winter 1841-42); book: *Commerce of the Prairies* [1844] in two volumes compiled from travel notes described Texas geology and trees; joined botanical expedition [1848] and collected in northwestern Mexico and California; corresponded with botanist George ENGELMANN (1809-1884) and sent specimens to him in St. Louis; twenty-three plants bear specific epithet *greggii*; died on February 25th 1850 after falling from a horse; eponyms: *Acacia greggii* (A. Gray, 1852) Gregg Acacia; *Ceanothus greggii* (A. Gray, 1853) Gregg Red Root; *Colubrina greggii* (S. Watson, 1882) Gregg Columbrina; *Cordia greggii* (Torrey, 1859) Gregg Clammy Cherry; *Dalea greggii* (A. Gray, 1854) Gregg Prairie Clover; *Peniocereus greggii* [Engelmann, 1848] (Britton+Rose, 1909) {=*Cereus greggii* (Engelmann, 1848)} Gregg Night-Blooming Cereus; *Pinus greggii* (Engelmann ex Parlatore in A. DeCandolle, 1868) Gregg Pine; *Salvia greggii* (A. Gray, 1872) Gregg Sage

GRINDEL, David Hieronymus (1776-1836) Russian (Latvian) chemist, pharmacist, physician, botanist and scientist; born in Riga (capital of Latvia) into a family of mast selectors and timber merchants; studied science and graduated from Jena University in eastern Germany; worked as an apothecary in Riga; became a chemistry professor at Riga; founded Riga pharmaceutical society (1803); in Riga published first pharmaceutical journal in Russian Empire: *Russisches Jahrbuch der Pharmazie* (1803-1810); became professor of chemistry and pharmacy (1804-1814) and a rector (1810-1812) at Tartu University [Dorpat in German] located in Estonia; established a chemistry laboratory in a private home (1807-1809); moved laboratory to new school building (1809); gained 6th rank as collegiate advisor; member of St. Petersburg Academy of Science; later studied in Tartu to become physician (1820-1822); worked as doctor and pharmacist in Riga (1822-1836); wrote many articles about pharmacy, chemistry and botany; studied Baltic flora; gained an hereditary title of nobility; descendants later moved to Germany; eponyms: *Grindelia* (Willdenow, 1807) Gumweed; *G. nuda* (A. W. Wood, 1878) Naked Gumweed; *G. squarrosa* [Pursh, 1814] (Dunal, 1819) {=*Donia squarrosa* (Pursh, 1814)} Scabby Gumweed

GRISEBACH, August Heinrich Rudolph (1814-1879); German botanist, taxonomist and

phytogeographer; born April 17th 1814 in Hanover; uncle a professor of botany at University of Göttingen; studied medicine and botany at Göttingen; became professor of botany at Göttingen (1837); later studied at Berlin; became director of Göttingen botanical garden; inspired by scientific expeditions of Alexander HUMBOLDT; traveled in Balkan peninsula (1839); contributed to the *Prodromus* of DeCandolle; studied: *Gentianaceae* (Gentian Family); book: *Genera et Species Gentianearum* (1838); studied: *Malpighiaceae* (West Indian Cherry Family); book *Malpighiacearum Brasiliensium Centuriam* (1839); studied flora of West Indies, Caribbean and South America; contributed to *Flora Brasiliensis* by Martius (volume 12, 1858); book: *Flora of the British West Indian Islands* (1858–64); published *Plantae Wrightianae* (1860-62) description of plants collected in Cuba and Santo Domingo by Charles WRIGHT (1811-1885); book *Catalogus Plantarum Cubensium* [Catalog of Cuban Plants] (1866); published *Die Vegetation der Erde nach Ihrer Klimatischen Anordnung* [Earth's Vegetation according to Climatic Arrangement] first edition 1872, second edition 1884, based on observations made earlier in Balkans and Germany; book: *Symbolae ad Floram Argentinam* [Illustrated Flora of Argentina] (1879); died May 9th 1879 in Göttingen; personal plant collections now at Göttingen University herbarium; eponyms: *Abuta grisebachii* (Triana+Planchon,1862) Grisebach White Pareira; *Saxifraga grisebachii* (Degen+Dorfler,1908?) Grisebach Saxifrage; *Setaria grisebachii* (E.Fournier,1886) Grisebach Bristle Grass

GUILLEMIN, Jean Baptiste Antoine (1796-1842); French botanist and physician; born January 20th 1796 in Pouilly-sur-Saône; worked at French National Museum of Natural History in Paris (1827); became doctor of medicine (1832); edited *Archives de Botanique* (1833); succeeded French botanist Adolphe Brongniart (1801-1876) as naturalist in museum botany department (1834); traveled in Brazil; studied plants of tropical western Africa; collaborated (1830-1833) with co-author Georges Guerrard Samuel PERROTET (1793-1870) on *Florae Senegambiae Tentamen* [Flora of Senegal and Gambia] [published in 1832] based on plants collected by F. M. R. Leprieur (1799-1869), a French botanical explorer who traveled in Senegal and French Guiana (1830-1836), and edited by French botanist Achille Richard (1794-1852); died January 15th 1842 in Montpellier; eponyms: *Guilleminea* (Kunth,1823) Mat Weed; *G.densa* [Humboldt +Bonpland ex Schultes,1819] (Moquin-Tandon in A. DeCandolle,1849) {=*Illecebrum densum* (Humboldt+Bonpland ex Schultes,1819)} Small Mat Weed; *Plantago guilleminiana* (Decaisne, 1881) Guillemin Plantain

GUTIERREZ, Pedro (?-?); Spanish traveler who corresponded with Mariano Lagasca y Segura (1776-1839) a Spanish botanist who directed the Madrid Botanical Garden and named one genus in his honor; no other information available; eponyms: *Gutierrezia* (Lagasca,1816) Snakeweed, Broomweed, Matchweed, Snakebroom; *G.microcephala* [DeCandolle,1836] (A.Gray,1849) {=*Brachyris microcephala* (DeCandolle,1836) Small-Head Snakeweed; *G.sarothrae* [Pursh, 1814] (Britton+Rusby,1897) {=*Solidago sarothrae* (Pursh, 1814)} Broom Snakeweed; *G.wrightii* A.Gray,1853) Wright Matchweed

HALEN, Jonas (died c.1750); minor Swedish botanist; name also spelled HALENIUS in Latin; student of Linnaeus at Uppsala; no other information available; eponyms: *Halenia* (Borkhausen,

1796) Spurred Gentian; *H.recurva* [J.E.Smith,1819] (C.K.Allen,1933) {=*Swertia recurva* (J.E.Smith,1819)} Recurved Spurred Gentian

HALL, Elihu (1822-1882); American plant collector; farmer from Illinois; collected in Texas, Colorado, Nebraska, and Oregon; organized Illinois Natural History Society (1858); during Civil War, joined Charles Christopher PARRY (1823-1890) and J. P. Harbour on expedition to explore Rocky Mountains in Colorado Territory under auspices of U.S. Department of Agriculture (1862); climbed Pike's Peak (July 1st 1862); collected over 700 specimens; returned to Illinois; sent collection to Asa GRAY (1810-1888) at Harvard who discovered thirty new species; returned to farming; used money earned from selling specimens to build a house; continued collecting and selling plants for two more years, then quit; wrote to Gray: *I can make more money raising potatoes than collecting plants*; eponyms: *Andropogon hallii* (Hackel,1884) {=*Andropogon gerardii* (Vitman,1792) subsp. *hallii* [Hackel,1884] (Wipff,1996) Hall Beard Grass; *Asclepias hallii* (A.Gray,1877) Hall Milkweed; *Panicum hallii* (Vasey,1884) Hall Panicum, Hall Panic Grass

HARTWEG, Karl Theodor [Theodore] (1812-1871); German plant collector and botanist; born June 18th 1812 in Karlsruhe; father from long line of gardeners; received excellent botany education; first worked at Jardin des Plantes in Paris; then for London Horticultural Society; protege of William Jackson HOOKER (1785-1865); sent on collecting expedition to Mexico (1836); traveled and collected for seven years in Mexico, Guatemala, Central America, Jamaica, northern South America, the Andes mountains, Colombia and Ecuador (1836-1843); found many new species and introduced them to cultivation, especially conifers and orchids; some species described by George Gordon, foreman of London Horticultural Society gardens; Sir George Bentham (1800-1884) published *Plantae Hartwegianae* (1839-1840) which described remainder; discovered *Pinus hartwegii* in Mexico and Central America; returned to England (1843); traveled on second mission to Mexico and California (1845-1848); arrived at Vera Cruz, crossed Mexico to Pacific Coast; discovered new orchid *Hartwegia purpurea* described by John Lindley; political problems between United States and England over control of Alta California blocked travel until May 1846; arrived at Monterey on June 7th; traveled to San Francisco, Sacramento, Chico, Sierra Nevada foothills, Soledad, San Antonio and Santa Lucia Mountains; discovered *Cupressus goveniana* (gowen cypress) near Monterey; sent seeds to England; Gordon described species based on trees grown from seed; became director of Schwetzingen Grand Ducal Gardens in Baden, Germany (1848-1871); died February 3rd 1871 at Schwetzingen; eponyms: *Hartwegia* (Nees,1831) Hartweg Orchid; *Hartwegiella* (O.E. Schulz,1933) Small Hartweg Orchid; *Asarum hartwegii* (S.Watson, 1875) Hartweg Wild Ginger; *Calylophus hartwegii* [Bentham,1839] (P.H.Raven,1964) {=*Oenothera hartwegii* (Bentham,1839)} Hartweg Sundrops, Hartweg Evening Primrose; *Cyphomandra hartwegi* (Sendtner ex Walper,1847) Hartweg Tomato Tree; *Dyssodia hartwegi* [A.Gray,1852] (B.L.Robinson,1913) {=*Hymenatherum hartwegii* (A. Gray, 1852)} Hartweg Fetid Marigold; *Lupinus hartwegii* (Lindley, 1839) Hartweg Lupine; *Paspalum hartwegianum* (E.Fournier,1886) Hartweg Paspalum Grass; *Penstemon hartwegii* (Bentham, 1840) Hartweg Beardtongue; *Senecio hartwegii* (Bentham,1839) Hartweg Groundsel, Hartweg RagWort; *Solanum hartwegi* (Bentham,1840) Hartweg NightShade

HAVARD, Valery (1846-1927); French born American career army officer and surgeon; born February 18th 1846 near Compiègne in France; studied medicine at Beauvais Institute and in Paris; emigrated to United States (c.1865); entered Manhattan College and Medical College of New York University; graduated from both (1869); physician at Children's Hospital and professor of French, botany and chemistry at Manhattan College (1869-1871); received masters degree (1871); entered United States Army medical corps (1874); assistant surgeon in United States army (1871-1874); at Fort Pembino, Dakota Territory (1874-1877); member of military expedition on Yellowstone River to Billings Montana (1875); member of 7th Cavalry in Montana pursuing hostile Sioux and Nez Perce Indians along Yellowstone, Musselshell, Missouri and Milk Rivers (1877); published several articles on flora of Montana, and North Dakota (1878); on third military operation to Montana (1879); described many plants and plant communities in his journals; studied plants used for food and medicine by Indians, Mexicans and early settlers; promoted to captain (1879); with 1st Infantry in west Texas building roads and collecting plants (1880); member of three exploring expeditions with Captain William R. Livermore to northwest Texas and along Rio Grande valley into New Mexico and southern Colorado (summers of 1881, 1883 and 1884); at Fort Schuyler and Fort Wadsworth in New York harbor (1884-1887); married Agnes J. Hewit of Bridgeport, Connecticut (November, 1885); published *Report on the Flora of Western and Southern Texas* (1886); at Fort Lincoln and Fort Buford in Dakota Territory (1887-1890); at Pine Ridge Indian Agency and Fort Russell in Wyoming (1890); promoted to major (1891); at David Island Recruit Depot in New York harbor (1892-1894); at West Point (1894-1898); published *Drink Plants of the North American Indians* (1896); mustered volunteer troops during Spanish-American War (1898); chief surgeon at Siboney, Cuba, during assault of San Juan Hill (July 1898); chief army surgeon, first at Santiago, then for entire Cuban Division (1899); hit by severe yellow fever attack (October 1900); promoted lieutenant-colonel (1901); published *Notes on Trees of Cuba* (1901); promoted to colonel (1904); chief surgeon at Governor Island; medical attache with Russian army in Manchuria (November 1904); captured at Mukden by Japanese (March 1905); taken to Japan, sailed from Yokohama to San Francisco and returned to New York (April 1905); head of museum and library at office of Surgeon General in Washington D.C.; retired (February 1910); settled in Fairfield, Connecticut; published botany articles; wrote three editions of *Manual of Military Hygiene* (1900-17); recalled from retirement during World War I (September 1917); in Havana to reorganize medical departments of Cuban army and navy (1917-1923); returned to Fairfield (1923); died November 6th 1927 of heart attack on steamship *Columbo* while returning from vacation in France; survived by wife, son and two daughters; eponyms: *Aristida havardii* (Vasey,1886) Havard Three-Awn Grass; *Lupinus havardi* (S.Watson,1882) Havard Lupine, Chisos Bluebonnet; *Oenothera havardi* (S.Watson,1885) Havard Evening Primrose; *Panicum havardii* (Vasey,1887) Havard Panic Grass, *Quercus havardii* (Rydberg,1901) Havard Oak

HENRY, Augustine [Austin] (1857-1930); Irish physician, plant collector in China and botanist; born July 2nd 1857 in Dundee, Scotland; father Bernard a flax merchant, mother named Mary McManee; soon after birth, family returned to Cookstown, County Tyrone, Ireland; studied at Cookstown Academy; completed bachelor degree (1877) and masters degree (1878) from

Queens University in Belfast; qualified as doctor; Sir Robert Hart encouraged him to join Chinese Imperial Maritime Custom Service; transferred to Edinburgh and studied Chinese; later studied Chinese law; became proficient in speaking Chinese; worked as assistant medical-customs officer in Shanghai (1881); eventually retired with Mandarin status; sent to remote Yichang in Hubei Province in central China (1882); collected plants and investigated medicinal herbs; later worked at Hupeh, Szechuan, Simao (Yunnan), Mengsi and Formosa (Taiwan); from 1882-1900, sent about 15,700 dry specimens, thousands of viable seeds and over 500 living plants to Kew Gardens; duplicates sent to other herbaria; many species undescribed, including *Davidia involucrata* first discovered in Tibet by Armand David; published list of Chinese plants in *Journal of Royal Asiatic Society* (1888); from 1888-1896, 25 new genera and 500 new species identified from his specimens; returned to Europe (1900); studied at French National Forestry School in Nancy (1900-1902); worked at Kew Gardens on his own plants (1902-1907); began (1903) working with co-author Henry J. Elwes on seven volume *Trees of Great Britain and Ireland* [1907-1913]; devised unique identification system using leaves, twigs and bud positions if flowers and fruit absent; established Chair of Forestry at Cambridge University (1907); professor of forestry at Cambridge (1907-1913); also studied Celtic arts and crafts; knew poets William Butler Yeats and George William Russell (pen name Æ); became Chair of Forestry at Royal College of Science in Dublin (1913-1926) [later University of Dublin]; honored with science society memberships in Belgium, Czechoslovakia, Finland, France and Poland; private collection of over ten thousand specimens organized (1930-1938) by his widow Alice H. Henry; deeded to National Botanic Gardens in Glasnevin, Dublin, as Augustine Henry Forestry Herbarium; his initial collections inspired later Chinese explorations by Ernest Henry Wilson (1876-1936), George Forrest (1873-1932), Charles Maries (c.1851-1902), Francis Kingdon-Ward (1885-1958) and others; eponyms: *Acanthopanax henryi* [Oliver,1887] (Harms,1897) {=*Eleutherococcus henryi* (Oliver,1887)} Henry Siberian Ginseng; *Ainsliaea henryi* (Diels, 1901) Henry Ainsliaea; *Chloranthus henryi* (Hemsley,1891) Henry Chloranthus; *Elaeagnus henryi* (Warburg,1900) Henry Oleaster; discovered *Emmenopterys henryi* (Oliver,1889) Hsiang-Kuo-Shu; *Illicium henryi* (Diels,1900) Henry Star Anise; *Lonicera henryi* (Hemsley,1888) Henry HoneySuckle; *Pleione henryi* [Rolfe,1896] (Schlechter,1919) {=*Coelogyne henryi* (Rolfe,1896)} Henry Pleione Orchid; discovered in 1886 *Rhododendron augustinii* (Hemsley,1889) Henry Rhododendron; *Salvia henryi* (A.Gray,1872) Henry Sage; discovered in 1887 *Viburnum henryi* (Hemsley,1888) Henry Blackhaw, Henry Crampbark

HEUCHER, Johann Heinrich von (1677-1747); early German botanist and physician; professor of medicine and botany at Wittenberg University; specialized in medicinal plants; no other information available; eponyms: *Heuchera* (Linnaeus,1753) Alum Root, Coral Bells; *H.novomexicana* (Wheelock,1890) New Mexican Alum Root; *H.rubescens* (Torrey,1852) Pink Alum Root

HEYDER, Edward (1808-1884); German cactus grower; no other information available; eponym: *Mammillaria heyderi* (Muehlenpfordt,1848) Pancake Nipple Cactus, Little Nipple Cactus, Heyder Nipple Cactus

HILAIRE see SAINT-HILAIRE

HIPP, Charles Friedrich (?-?); friend of the German botanist Johann Georg Christian LEHMANN (1792-1860) director of the Hamburg Botanical Garden who studied the genus *Potentilla* (cinquefoil) and described a species named in Hipp's honor; eponyms: *Potentilla hippiana* (Lehmann,1830)

HOFFMANNSEGG, Count Johann Centurius Graf von (1766-1849); German botanist, entomologist and ornithologist; born August 23rd 1766 in Dresden; land owner and private scholar; studied at Leipzig and Göttingen (1793-1794); traveled through Europe collecting plants and animal specimens; visited Hungary, Austria and Italy (1795-1796) with German botanist Johann Heinrich Friedrich Link (1767-1851) director of Berlin Botanical Garden; visited Portugal (1797-1801); studied flora of Portugal; sent collections to Johann Karl Wilhelm Illiger in Brunswick; book: *Flore Portugaise* (1809-1820) co-authored with Link; worked in Berlin (1804-1816); founded zoological museum in Berlin (1809); proposed Illiger as curator; private collections transferred to Berlin; elected member of Berlin Academy of Science (1815); died December 13th 1849 in Dresden; eponyms: *Hoffmannseggia* (Cavanilles,1797) Hog Potato; *H.glauca* [Ortega,1797] (Eifert,1972) {=*Larrea glauca* (Ortega, 1797)} Glauous Hog Potato; *Odontadenia hoffmannseggiana* (Woodson,1933) Hoffmansegg *Odontadenia*

HOUSTON, William (1695-1733); name also spelled: HOUSTON; Scottish physician and botanist; studied medicine and medical uses of newly discovered plants; graduated from University of Leiden in Netherlands (1729); traveled and collected in Mexico, West Indies, Central America and northern South America (1729-1731); sent specimens to London; published account in *Catalogus Plantarum Horti Regii Parisiensis*; returned to London (1731); Georgia Colony trustees financed a second trip to obtain plants for gardens planned in Savannah, Georgia; traveled to Madeira Islands, procured grape plants and crossed Atlantic; however, he died prematurely in Jamaica (1733); another more well-known but unrelated William Houston (1755-1813) of Georgia – delegate to Continental Congress from Georgia (1784-86) and member of United States Constitutional Convention (1787) – has not been honored botanically; eponyms: *Houstonia* (Linnaeus,1753) Bluet, Quaker Lady; *H.wrightii* (A.Gray,1882) Pygmy Bluet, Wright Bluet; *Calliandra houstoniana* [Miller,1768] (Standley,1922) {=*Mimosa houstoniana* (Miller, 1768)} Houston False Mesquite; *Ageratum houstonianum* (Miller,1768) Houston GoatWeed; *Mikania houstoniana* [Linnaeus,1753] (B.L.Robinson,1906) {=*Eupatorium houstoniana* (Linnaeus,1753)} Houston Guaco

HOOPES, Josiah (1832-1904); American botanist and nurseryman; born November 1832, in West Chester, Pennsylvania; son of Pierce and Sarah Hoopes, devout fourth-generation Quakers; father a farmer and lumberman; one brother Abner survived childhood; Josiah started Cherry Hill Nursery (1853); imported trees from England; Abner joined and changed name to Hoopes Brothers Nursery (1857); after Civil War, nursery became one of largest in United States; Abner married Malinda Marshall Worthington (1865); became founding director of Edison Electric Illuminating Company; third partner George Brinton Thomas joined and managed books (1866);

Josiah became expert on conifers and ornamental trees; *Book of Evergreens* (1868) a standard textbook; founder and seven-year president of Horticultural Association of Pennsylvania; vice-president of American Pomological Society; member of Academy of Natural Sciences; honorary member of National Horticulture Society of Brazil and Massachusetts Horticulture Society; married at age 66 to Ellen Agnes Morgan (1898); daughter of local farmers Patrick and Johanna Morgan, and thirty years younger; one son Josiah Morgan Hoopes born (1899); died (1904) in West Chester; eponyms: *Hymenoxys hoopesi* [A.Gray,1863] (Biener,1994) {=*Helenium hoopesi* (A.Gray,1863)} Sneezeweed, Bitterweed, Pingue

IRIS (Ἴρις) – In Greek mythology, goddess of rainbows and a messenger of the gods; name derived from Greek: iris (ἵρις) or: iridos (ἱρίδος) = a rainbow; flowers named in her honor since very ancient times because of their many colors; eponyms: *Iris* (Linnaeus,1753); *I. missouriensis* (Nuttall,1834) Missouri Iris

JAMES, Edwin (1797-1861); American botanist, surgeon and naturalist; born and raised in Vermont; studied medicine and botany; after botanist William Baldwin died in Missouri near end of first year of army expedition led by Major Stephen H. Long (1819), American botanist John Torrey recommended James as botanist, geologist and chronicler during second year (1820); started near Omaha on Missouri River; sought sources of Platte, Arkansas and Red Rivers; suffered several Indian attacks; explored in Colorado Rocky Mountains; first white man to climb an American peak over 14,000 feet described in 1806 by Zebulon Pike; collected alpine plants; discovered cliffbush *Jamesia americana* var. *rosea*; Thomas Say expedition zoologist discovered Say's phoebe *Sayornis saya*; Long named the mountain James Peak but later Pikes Peak became accepted; returned east with hundreds of plants later described by Torrey and Asa Gray; intended to go on Long's next expedition to source of Mississippi River but missed connections; became an army surgeon (c.1826-1836); moved to Iowa and became a recluse and abolitionist; studied Indian languages; edited temperance journal; died from wood hauling accident; eponyms: *Jamesia* (Torrey+A.Gray,1840) Cliff Bush; *J. americana* (Torrey+A.Gray,1840) American Cliff Bush; *Boykinia jamesii* [Torrey,1827] (Engler,1891) {=*Saxifraga jamesii* (Torrey,1827)} James Brook Saxifrage; *Carex jamesii* (Schweinitz,1824) James Sedge; *Cristatella jamesii* (Torrey +A.Gray,1838) James Clammy Weed, James Cristatella; *Cryptantha jamesii* (Payson,1927) {=*Eritrichium jamesii* (Torrey,1854)} James Cryptantha; *Eriogonum jamesii* (Bentham,1856) Antelope Sage, James Buckwheat Bush; *Hilaria jamesii* [Torrey,1824] (Bentham,1881) {=*Pleuraphis jamesii* (Torrey,1824)} James Galleta Grass; *Hoffmannseggia jamesii* (Torrey +A.Gray,1840) James Hoffmannseggia; *Penstemon jamesii* (Bentham,1846) James Beard Tongue; *Solanum jamesii* (Torrey,1827) James Nightshade

KOCH, Wilhelm Daniel Joseph (1771-1849); German botanist and physician; born March 5th 1771 in Kusel in Rhineland Palatinate; studied medicine at Universities of Jena and Marburg; state physician in Trarbach and Kaiserslautern (1798-1824); wrote book: *Catalogus Plantarum Florae Palatinae* (1814) [Catalogue of Palatinate Flora]; professor of medicine and botany at University of Erlangen and director of its Botanical Garden (1824-1849); co-author with Franz Carl MERTENS (1764-1831) of five volume *Deutschlands Flora* [1826] [Flora of Germany];

and *Synopsis der Deutschen und Schweizer Flora* (1835-1847) [Synopsis of German and Swiss Flora]; also studied *Apiaceae* [= *Umbelliferae*] (parsley family); died November 14th 1849; eponyms: *Kochia* (Roth, 1801) *Kochia*; *K.scoparia* [Linnaeus, 1753] (Schrader, 1809) {=*Chenopodium scoparium* (Linnaeus, 1753)} Summer Cypress, Rock Kochia

KOEBERLIN, Christoph Ludwig (c.1794-1862); German clergyman and botanist; genus named in his honor in 1832 by German botanist Joseph Gerhard Zuccarini (1797-1848) a professor of botany at Munich; no other information available; eponyms: *Koebelinia* (Zuccarini, 1832) AllThorn, Junco, Crown of Thorns; *K.spinosa* (Zuccarini, 1832)

KOELER, Georg Ludwig (1765-1807); German botanist, physician and pharmacist; professor of botany at Mainz; studied grasses of Germany and France; book: *Descriptio Graminum in Gallia et Germania* (1802); no other information available; eponyms: *Koeleria* (Persoon, 1805) June Grass; *K.macrantha* [Ledebour, 1820] (Schultes, 1824) {=*Aira macrantha* (Ledebour, 1815)} Large-Flowered June Grass

KRAMER, Johann Georg Heinrich (1684-1744); Austro-Hungarian army physician and botanist; no other information available; eponyms: *Krameriaceae* (Dumortier, 1829) Rhatany Family; *Krameria* (Loefling, 1758) Rhatany; *K.lanceolata* (Torrey, 1827) Lance-Leaved Rhatany

KRASCHENINNIKOV, Stephan [Stepan] Petrovich (1713-1755); early Russian botanist and explorer; studied at Imperial Academy of Sciences in St. Petersburg; professor of natural history; accompanied Danish explorer Vitus Jonassen Bering on second arctic expedition (1733-1743); explored Kamchatka Peninsula and nearby Kurile Islands (1736-1740); accompanied by German naturalist George Wilhelm Steller (1709-1746) first white man to enter Alaska who discovered Stellar's jay and Stellar's seacow (now extinct); ship wrecked and Bering died of scurvy on Bering Island (1741); his grave and those of five other sailors recently discovered (1991); Krascheninnikov survived and wrote report entitled *History of Kamtschatka and the Kurilski Islands* (1755); described geography, geology, natural history, customs, dialects, religions and superstitions; eponyms: *Krascheninnikovia* (Gueldenstaedt, 1772) Winter Fat; *K.lanata* [Pursh, 1814] (A.Meeuse+A. Smit, 1972) {=*Diotis lanata* (Pursh, 1814) =*Eurotia lanata* [Pursh, 1814] (Moquin-Tandon, 1840)} Woolly Winter Fat

LAMBERT, Aylmer Bourke (1761-1842); English botanist; born February 2nd 1761 at Bath; only son of Edmund Lambert of Boyton House, near Heytesbury, Wiltshire; collected plants at Boyton House before entering school; studied at Hackney School (1773); entered St Mary Hall, Oxford, January 26th 1779 but never graduated; met topographer Daniel Lysons and botanists Sir Joseph Banks and Sir James Edward Smith; elected fellow of newly created Linnaean Society of London (1788); elected fellow of Royal Society (1791); joined Society of Antiquaries (1791); elected member of numerous foreign societies; vice-president of Linnaean Society (1796-1842); father died (1802); moved from Salisbury back to Boyton House; botanical patron who entertained foreign naturalists; collected an herbarium of over 30,000 specimens and opened it to botanical students; married Catherine Bowater of Allesley, Warwickshire but had no children;

most well-known book: *A Description of the Genus Pinus* – lavishly illustrated with descriptions of all conifers then known – issued in five editions between 1803 and 1842; published *An Illustration of the Genus Cinchona* (1821); many conifers discovered by David Douglas, including Coast Redwood, first described by Lambert and collaborating author David Don; moved to Kew Green for health reasons; died January 10th 1842; eponyms: *Lambertia* (J.E.Smith,1798) Honey Flower (an Australian Protea); *Canna lambertii* (Lindley,1820) Lambert Canna Lily; *Geranium lambertii* (Sweet,1827) Lambert Cranesbill; *Ladenbergia lambertiana* [A.Braun ex Martius,1831] (Klotzsch,1846) {=*Cinchona lambertiana* (A.Braun ex Martius, 1831)} Lambert Quinine; *Oxytropis lambertii* (Pursh,1814) Purple Locoweed, Lambert Locoweed; *Pinus lambertiana* (Douglas,1827) Lambert Pine, Sugar Pine

LARREA, Don Juan Antonio Hernandez Perez de (1730-1803); Spanish clergyman and patron of science; supported work by his contemporary Spanish botanist Antonio Jose CAVANILLES (1745-1804) professor of botany at University of Madrid and director of Madrid Botanical Garden; eponyms: *Larrea* (Cavanilles,1800) Creosote Bush, Chaparral, Greasewood; *L.tridentata* [Sessé+Mocino ex DeCandolle,1824] (Coville,1893) {=*Zygophyllum tridentatum* (Sessé+Mocino ex DeCandolle,1824) Creosote Bush

LAY, George Tradescant (c.1800-1845); early life not recorded; English naturalist on expedition of H.M.S. *Blossom* commanded by Captain Frederick William Beechey's to Pacific coast of North America and Bering Strait (1825–1828); accompanied by botanist Alexander Collie (1793-1835); collections later described by Sir William Jackson Hooker and George Walker Arnott; returned to England and sent to China as missionary by British and Foreign Bible Society; married (c.1829); spoke Chinese; resided in Macao (1837); published essay in England: *Trade with China* (1837); entered British Consular Service; appointed British Consul at Canton (1843); first British consul in Fu Chow, sent by ship from Hong Kong to mouth of Min River and established consulate (July, 1844); transferred to Amoy (1845); shortly before death published book: *The Chinese as They Are: Their Moral, Social and Literary Character*; died November 6th 1845 in Amoy; eponyms: *Layia* (W.J. Hooker+Arnott ex DeCandolle,1838) Tidy Tips; *L.glandulosa* [W.J. Hooker,1833] (W.J.Hooker+Arnott ex DeCandolle,1838) {=*Blepharipappus glandulosus* (W.J.Hooker,1833) Glandular Tidy Tips

LEERS, Johann Georg Daniel (1727-1774); German pharmacist (apothecary) and botanist; studied local flora of Germany; book: *Flora Herbornensis* (1775); eponyms: *Leersia* (Solander ex Swartz, 1788) Cut Grass, Leers Grass; *L.oryzoides* [Linnaeus,1753] (Swartz,1788) {=*Phalaris oryzoides* (Linnaeus,1753)} Rice Cut Grass, Rice Leers Grass

LEHMANN, Johann [Johan] Georg Christian (1792-1860); German botanist and physician; born February 25th 1792 in Haselau bei Uetersen, Holstein; studied medicine in Copenhagen and Gottingen; received doctorate in medicine from University of Jena (1813); received doctorate in philosophy from University of Jena (1814); head librarian, professor of physics and professor of natural sciences at *Gymnasium Academicum* in Hamburg (1814-1860); founder and director of Hamburg Botanic Garden; member of 26 learned societies; wrote plant monographs, especially on *Nicotiana* (1818) tobacco, *Primula* (1819) primrose, *Potentilla* (1820) cinquefoil; studied

Australian flora by describing, along with several other European collaborators, plants collected by German botanist and naturalist Johann August Ludwig Preiss (1811-1883); full book title: *Plantae Preissianae Sive Enumeratio Plantarum Quas in Australasia Occidentali et Meridionale Occidentali Annis 1838-1841* — usually indicated as *Plantae Preissianae* published from 1844 to 1848; Preiss arrived at Swan River settlement in December 1838, bought specimens from local residents, collected in southwestern Australia and coastal islands, and by 1841 had sent over 200,000 specimens to Lehmann; other eastern Australian plants collected by Sir Thomas Mitchell and John Lhotsky also included; friend of Charles Friedrich HIPPEL; died February 12th 1860 in Hamburg; another German botanist Friedrich Carl Lehmann (1850-1903) who collected in South America given separate honors; eponyms: *Eragrostis lehmanniana* (Nees, 1841) Lehmann Lovegrass

LEMMON, John Gill (1832-1908); American botanist and explorer; born January 2nd 1832 in Lima, near Ann Arbor, Michigan; son of William and Amila (nee Hudson) Lemmon; descended on mother's side from Dutch explorer Henry Hudson; childhood rough frontier life; father died (c.1842); attended common schools and Michigan State Normal; three eldest brothers (William, Frank, Alexis) traveled to California for gold rush (1850); taught village school; made superintendent of county schools (1854-1858); entered University of Michigan (1859); mother joined brothers in California (1860); left school before graduation to enlist in 4th Michigan Cavalry (June 8th 1862); involved in 36 Civil War battles in Kentucky, Tennessee, Alabama and Georgia; regiment captured by Jefferson Davis and sent to Andersonville Prison (August 24th 1864); later described experience in *Recollections of Rebel Prisons*; mother lost all possessions and nearly drowned in Sacramento River flood near Marysville (1863); arrived in California (1866); explored extensively and studied flora of Pacific Slope — California, Great Basin, south into Mexico and north to Alaska panhandle (1866-1875); taught school in Sierra Valley (1875-1877); settled in Oakland (1877); married (November 1880) to Sara Allen Plummer, artist and teacher from Maine and New York City; mother lived her last six years with them (1879-1885); appointed California State Forester (1887-1891); corresponded with Asa GRAY (1810-1888); studied conifers; added over 150 new plant species to botanical literature; articles published in *Pacific Rural Press*, *Mining and Scientific Press*, *Overland Monthly*, *Californian*, *California Teacher*, *Sierra Club Bulletin* and especially *Reports of California State Board of Forestry*; books: *Ferns of the Pacific*, *Handbook of West America*, *Conebearers*, *Oaks of the Pacific Slope* (1902); *Trees of West America*; wife illustrated many of his books and articles; she also wrote *Marine Algae of the West* and *Western Ferns*; she authored bill to adopt golden poppy as California state flower (carried March 7th 1891); he represented Oakland at National Irrigation and Forestry Congress in Sacramento (1907); eponyms: *Asarum lemmonii* (S. Watson, 1879) Lemmon Wild Ginger; *Asclepias lemmonii* (A. Gray, 1883) Lemmon Milkweed; *Brickellia lemmonii* (A. Gray, 1882) Lemmon Brickle Bush; *Brickellia lemmonii* var. *wootonii* [E.L. Greene, 1897] (B.L. Robinson, 1917) {=*Coleosanthus wootonii* (E.L. Greene, 1897)} Lemmon Brickle Bush; *Eriochloa lemmonii* (Vasey+ Scribner, 1884) Lemmon Cup Grass; *Eschscholzia lemmonii* (E.L. Greene, 1887) Lemmon California Poppy; *Phalaris lemmonii* (Vasey, 1892) Lemmon Canary Grass; *Puccinellia lemmonii* [Vasey, 1878] (Scribner, 1899) {=*Poa lemmonii* (Vasey, 1878)} Lemmon Alkali Grass; *Stipa lemmonii* [Vasey, 1892] (Scribner, 1901) {=*Stipa pringlei* var.

lemmonii (Vasey, 1892)} Lemmon Needle Grass; Mount Lemmon near Tucson also named for him

LEWIS, Captain Meriwether (1774-1809); American soldier, explorer and public administrator; co-leader of Lewis and Clark Expedition (1806-1807) with American explorer Captain William Clark (1770-1838); born August 18th 1774 in Albemarle County, Virginia to Captain George Lewis (1712-1781) and Lucy Meriwether (1751-1837); family moved to Georgia (1784); received private tutoring in Virginia with Parson Matthew Maury who also taught Thomas Jefferson for two years (1787); graduated from Liberty Hall, now Washington and Lee University (1793); joined Virginia Militia in detachment which ended Whiskey Rebellion (1794); joined regular U.S. Army as Lieutenant (1795); served until 1801 under William Clark his later expedition companion; appointed aide to President Jefferson and resided in White House (1801); chosen to lead expedition (early 1803); sent to Philadelphia for cartography instructions (June 1803); requested Clark as co-leader and Jefferson agreed; traveled from Pittsburgh to St. Louis via Ohio River (summer 1803); explored Missouri and Columbia River watersheds (1804-1806); observed, collected and described many previously unknown plant and animal species; made first contact with several Native American tribes; appointed governor of Louisiana Territory and settled in St. Louis (1807); poor administrator, quarreled with local leaders, lost touch with Washington; traveled east to answer complaints (September 1809); died on return journey under mysterious circumstances at Grinder Stand Tavern 70 miles from Nashville on Natchez Trace from multiple gunshot wounds (October 10th 1809); ruled a suicide but many claimed murder; suspect or motive never determined; buried along Natchez Trace Parkway; never married; died October 11th 1809; eponyms: *Lewisia* (Pursh, 1814) Bitter Root; *Linum lewisii* (Pursh, 1814) Blue Flax, Lewis Flax; also Lewis Woodpecker; counties in Idaho, Montana, Tennessee and Washington; Lewisburg, Tennessee; Lewiston, Idaho; Fort Lewis, Washington; and nuclear submarine USS Lewis and Clark named in his honor

LINDLEY, John (1799-1865); noted English botanist; born February 8th 1799 in Catton, near Norwich; father George Lindley owned a nursery and wrote *A Guide to the Orchard and Kitchen Garden*; educated at Norwich Grammar School; wrote *Monographia Rosarum* (1820) and described new species with personal drawings; *Monographia Digitalium* (1821), *Observations on Pomaceae* (1822); contributed to Linnaean Society; moved to London and wrote descriptive portions of *Encyclopaedia of Plants* for J.C. Loudon (completed 1829); became convinced a natural system of botanical classification based on family groups as proposed by French botanist Antoine Laurent de Jussieu far superior to artificial system based on sexual characteristics begun by Linnaeus and used in *Encyclopaedia*; arranged *A Synopsis of British Flora* (1829) by new method; *An Introduction to the Natural System of Botany* (1830, 1836, 1848) completely broke with past tradition; studied *Orchidaceae* (orchid family); assistant secretary to Horticultural Society (1822-1829); appointed professor of botany at University College [later London University] (1829-1860); lectured on botany at Royal Institution (after 1831); lectured on botany at Chelsea Physic Garden (after 1836); started annual Horticultural Society flower show (late 1830's); edited *Edward's Botanical Register* (1829-1847); edited *Gardener's Chronicle* (after 1841); fellow of Royal Society, Linnaean Society and Geological Society; other books: *An*

Outline of the First Principles of Horticulture (1832); *An Outline of the Structure and Physiology of Plants* (1832); *The Genera and Species of Orchidaceous Plants* (1828-1840); *Elements of Botany* [1830,1849], *The Fossil Flora of Great Britain* with co-author William Hutton (1831-1837); *Theory of Horticulture* (1840); *The Vegetable Kingdom* (1846-1847); *Folia Orchidacea* (1852); *Contributions to the Orchidology of India* [1857], *Descriptive Botany* (1858); *The Treasury of Botany* [1870-1876] – published posthumously by Thomas MOORE (1821-1887); died at home in Bedford Park near Turnham Green on November 1st 1865; eponyms: *Lindleya* (Kunth,1824) [Mexican genus in *Rosaceae*]; *Begonia lindleyana* (Walpers, 1843) Lindley Begonia; *Cupressus lindleyi* (Klotzsch ex Endlicher,1847) Lindley Cypress; *Mentzelia lindleyi* (Torrey+A.Gray,1840) Lindley StickLeaf; *Picrorhiza lindleyana* (Steudel, 1841) Lindley BitterRoot; *Uropappus lindleyi* [DeCandolle,1838] (Nuttall,1841) {=*Calais lindleyi* (DeCandolle,1838)} Lindley Silver Puffs

LINNAEUS, Carolus (1707-1778) Swedish botanist, physician and zoologist; name also spelled Carl Linnaeus, Carl Linné or Carl von Linné [senior]; considered father of botany; first to use binomial nomenclature systematically; founder of sexual system of classification; professor of botany at Uppsala; father of Carl von Linné [junior] (1741-1783); born May 23rd 1707 on Råshult farm in Älmhult township in Småland province in southern Sweden; father attended University of Lund and adopted permanent last name Linnaeus from giant linden tree on family homestead; son expected to join clergy like his father but had no interest; entered primary school at Växjö (1717); entered cleric gymnasium with poor results (1724); local physician convinced father to enrolled son at University of Lund; tended neglected botanical garden; advised to enter University of Uppsala; had initial financial difficulties; met renowned scientist Olof Celsius, uncle of astronomer Anders Celsius (1701-1744) inventor of temperature scale; became convinced stamens and pistils most important elements of classification; wrote short treatise on plant sexuality (1729); gained attention of university botany professor Olof Rudbeck the Younger (1660-1740); Rudbeck provided room and board and appointed Linnaeus his adjunct or assistant which alleviated financial difficulties; began giving faculty lectures (1730); traveled on expedition to sub-arctic Lapland in northern Sweden financed by Academy of Science at Uppsala (1732); traveled to Dalarna and met Sara Elisabeth Moraeus [future wife] (1734); moved to the Netherlands (1735–1738); earned degree at University of Harderwijk in 6 days; visited London and Oxford University (1736); met physicist Hans Sloane, botanist Philip Miller (1691-1771) and botany professor Johann Jakob Dillenius (1684-1747); returned to Amsterdam, began printing *Genera Plantarum* and published *Florula Lapponica* – first book using sexual system (1737); worked and studied at Heemstede Garden owned by George Clifford, wealthy Amsterdam banker introduced by Herman Boerhaave who collected plants from around the world via connections with Dutch merchants (1737); published description of garden in *Hortus Cliffortianus* (1738); met druggist Albertus Seba and botanist Jan Frederik Gronovius; published eleven page *Systema Naturae* [1st edition, 1738]; stayed in Leiden for a year, printed *Classes Plantarum*, traveled to Paris and returned to Sweden (1738); practiced medicine and lectured in Stockholm (1739); founder of Royal Swedish Academy of Sciences (1739); married Sara Elisabeth Moraeus at her family farm Sveden outside Falun (1739); became professor of medicine at Uppsala (1741); soon changed position to professor of botany; arranged University

botanical garden according to sexual system; traveled to Stora Alvaret on Öland and also to Gotland (1741); continued to revise *Systema Naturae* – expanded from eleven page pamphlet to many volumes; designed modern thermometer scale by reversing Anders Celsius – originally 100 melting point of ice and 0 boiling point of water (1744); traveled to Västergötland (1746); sent student Pehr Kalm to North America (1748–1751), traveled to Scania and Kullaberg (1749); published: *Species Plantarum* [1st edition, May 1st 1753] official beginning of binomial nomenclature; published: *Genera Plantarum* [5th edition, January 28th 1754]; ennobled by Sweden's King Adolf Fredrik (1757); published: *Systema Naturae* [10th edition, June 7th 1759] which established Linnaean system of hierarchy: kingdoms, divisions, classes, orders, genera, species; published: *Species Plantarum* [2nd edition, volume 1, September 1762 and volume 2, July 1763]; published: *Genera Plantarum* [6th edition, June 1764]; published: *Species Plantarum* [3rd edition, September 1764]; published: *Systema Naturae* [11th edition, 1765, 12th edition, volume 1, 1766, and volume 2, October 15th 1767]; published: *Mantissa Plantarum* [1st edition, October 15th 1767]; published: *Systema Naturae* [12th edition, volume 3, 1768]; sent student Daniel Solander with Captain James Cook on first Pacific expedition (1768); published: *Systema Naturae* [12th edition, volume 4, 1770]; sent student Daniel Solander and to Iceland, Faroes and Orkney Islands (1771); published: *Mantissa Plantarum* [2nd edition 1771]; sent student Fredric Hasselquist to Palestine and Asia Minor; suffered from gout and tooth aches; weakened by stroke (1774); sent student Carl Peter Thunberg to Japan, South Africa, Java and Sri Lanka; paralyzed on right side by second stroke (1776); died January 10th 1778 at ceremony held in Uppsala Cathedral; buried in cathedral; became most widely known and acclaimed scientist of his time; only botanist whose official name abbreviation is a single letter [L.]; motto: God created, Linnaeus organized; eponyms: *Linnaea* (Linnaeus, 1753) Twin Flower; Swedish 100 kronor bill also honors him

LOBEL, Matthias de (1538-1616); early Flemish physician, herbalist and botanist; name also spelled: OBEL or L'OBEL and Matthaeus LOBELIUS in Latin; born in Lille, then part of Belgium; father a lawyer; studied medicine in Leuven and then Montpellier; taught by famed French anatomist and zoologist Guillaume Rondelet (1507-1566); met classmate Pierre Pena (c. 1520-1600); together co-authored: *Adversaria Nova* (1570) a milestone in botanical history, which asserted that medicine and botany must be based on exact observations; became physician to William the Silent, Prince of Orange; practiced medicine in Antwerp; published: *Observationes* (1576), with many plant illustrations, later artwork also used in herbals by Dodoens and Clusius; during political turmoil, moved to England (c.1588); director of private gardens for Lord Zouch of Hackney (c.1592); became physician and botanist to king James I (1606); died March 3rd 1616 at Highgate in London; plant illustrations again used in England for two editions of Gerard's herbal edited by Johnson (1633 and 1636); eponyms: *Lobeliaceae* (R. Brown, 1817) Lobelia Family {~*Campanulaceae* (Jussieu, 1789) Bell Flower Family}; *Lobelia* (Linnaeus, 1753) Lobelia; *L. cardinalis* (Linnaeus, 1753) Cardinal Flower; *L. nuttallii* (Roemer +Schultes, 1819) Nuttall Cardinal Flower; *Acer lobelii* (Tenore, 1811) Lobel Maple

MARIA-LOUISA, Princess of Parma (1751-1819); youngest daughter of Duke Philip I of Parma and Louise-Élisabeth eldest daughter of King Louis XV of France; christened Louisa

Maria Teresa but known as Maria Louisa; married (1765) to first cousin who became King Charles [Carlos] IV of Spain (1748-1819); reigned (1788-1808) but abdicated due to pressure from Napoleon; both lived in exile in Italy (1808-1819); they had 14 children; name of genus *Aloysia* coined from letters of her name (Louisa); first described by Spanish botanists Casimiro Gomez Ortega (1740-1818) and co-author Antonio Palau y Verdera (d.1793) and officially published in 1784 in first edition of *Parte Práctica de Botánica*; species *Aloysia triphylla* {=*Lippia citriodora*} known as Herb Louisa in Europe and Lemon Verbena in North America, was introduced to Europe by 17th century Spanish explorers who brought specimens back from Chile and Argentina; many common names (limonetto, verveine citronelle) allude to lemon scented leaves; eponyms: *Aloysia* (Ortega+Palau, 1784 ex Persoon,1807) Bee Brush, *A.wrightii* (A.Heller ex Abrams, 1906) Wright BeeBrush, Wright Aloysia

MACDOUGAL, Daniel Trembly (1865-1958); American botanist, plant physiologist and desert flora expert; born in Liberty, Indiana; grandson of Scottish immigrants; attended DePauw University; received masters degree from DePauw (1894); received Ph.D. from Purdue University; post-doctoral study at Leipzig and Tubingen in Germany; employed by United States Department of Agriculture to collect plants in Idaho (summer 1891) and Arizona (summer 1892); taught plant physiology at University of Minnesota (1893-1899); worked at New York Botanical Garden as director of laboratories (1899-1905); collected in Nebraska and Montana (summer 1901); promoted assistant director (1904); member of New York Botanical Garden committee to establish tropical research laboratory; created and appointed first director of Desert Plant Laboratory in Tucson, Arizona (1905); became botanical research director at Carnegie Institute in Washington, D.C. (1905); remained there until 1933; organized Pinacate expedition to lava fields in Mexico with Godfrey Sykes and William T. Hornaday (1907); established coastal botanical laboratory in Carmel, California, to study Monterey pine (1909); teamed with Godfrey Sykes to cross Libyan desert (1912); became leading American authority on desert ecology; researched chlorophyll; invented MacDougal dendrograph to record changes in tree trunk volume; received awards from American Philosophical Society, Explorers Club, American Society of Plant Physiology and American Academy of Arts and Sciences; honorary member of California Academy of Sciences and Botanical Society of Edinburgh; life member of Torrey Botanical Club and Botanical Society of America; honorary degree from DePauw (1912) and from University of Arizona (1915); retired 1933; elected honorary president of International Botanical Congress in Stockholm (1950); awarded first certificate for distinguished service from New York Botanical Garden (1956) and merit award from Botanical Society of America (1956); died 1958; eponyms: *Verbena macdougalii* (A.Heller,1899) Spike Verbena, MacDougal Vervain

MACLURE, William (1763-1840); Scottish born American geologist and philanthropist; born in Ayr, Scotland; friend of American botanist Thomas NUTTALL (1786-1859); considered father of American geology; immigrated to United States (1782) at age 19; returned to London and became wealthy businessman; retired to a life of travel; immigrated again and became naturalized citizen (1796); undertook project to make geologic map of United States; traveled throughout area east of Mississippi River; crossed and re-crossed Appalachians; utilized rock classification system with distributions shown in color originated by German geologist Abraham

Gottlob Werner (1750-1817); published first widely available geologic map of the United States in Transactions of American Philosophical Society (1809); revised and expanded map (1817); also wrote about West Indian, European and Mexican geology; oppose building Erie Canal because of a rural outlook; attempted but failed to start an agricultural school in Spain (1819); with Robert Owen – wealthy Scottish industrialist and social reformer – purchased entire town of New Harmony, Indiana (1824); intended to create utopian community and reform education; arrived in New Harmony (January 1826); experiment lasted two years (1826-1828); Owen returned to Scotland and a disillusioned Maclure traveled to Mexico; he died there in 1840; eponyms: *Maclura* (Nuttall, 1818) Bow Wood, Osage Orange; *M. pomifera* [Rafinesque, 1817] (C. Schneider, 1906) {=*Toxylon pomiferum* (Rafinesque, 1817); =*Maclura aurantiaca* (Nuttall, 1818)} Osage Orange

MACOUN, James Melville (1862-1920); Canadian botanist; born November 7th 1862 in Belleville, Ontario; eldest son of John MACOUN [see below] (1832-1920); curator of the Canadian National Herbarium; explored in western Canada on several geological surveys with his father; studied Canadian mosses and lichens; collected with William Copeland McCALLA; worked in Pacific seal fisheries; explored and collected in Bering Sea area and Pribilof Islands; died January 8th 1920; eponyms: *Calamagrostis canadensis* [Michaux, 1803] (P. Beauvois, 1812) {=*Arundo canadensis* (Michaux, 1803)} var. *macouniana* [Vasey, 1885] (Stebbins, 1930) {=*Deyeuxia macouniana* (Vasey, 1885); =*Calamagrostis macouniana* (Vasey, 1892)} Macoun Blue Joint Grass, Macoun Reed Grass; *Eleocharis macounii* (Fernald, 1899) Macoun Spiked Rush

MACOUN, John (1831-1920); Irish born Canadian naturalist and botanist; born April 17th 1831 in Magheralin, County Down; third child of James Macoun and Anne Jane Nevin; father died in 1837; emigrated to Canada due to Irish potato famine (1850); settled in Seymour Township, Ontario; started farming but became school teacher (1856); developed keen interest in botany; despite scant education, field work and dedication merited attention of professional botanists; taught school in Belleville, Ontario (1860); established correspondence with Asa Gray, Sir William Jackson Hooker, George Lawson and Louis-Ovide Brunet; became professor of botany, natural history and geology at St. Alberts College in Belleville (1868); married Ellen Terrill of Brighton, Ontario (January 1st 1862); had two sons and three daughters; met by chance Sanford Fleming, chief engineer for proposed Canadian Pacific Railway; recruited for survey expedition to Pacific (1872); participated in five trips to northwest Canada (1872-1881); eldest son James Melville MACOUN [see above] (1862-1920) joined several trips; survey determined best railroad route and rated agricultural potentials; desire to stop American northward expansion helped set southern route for Canadian Pacific Railroad across central prairie; reports read by Alfred Richard Cecil Selwyn, director of Canadian Geological Survey (CGS); officially named *explorer of Northwest Territory* by Canadian government (1879); moved family to Ottawa (1881); joined CGS as *Dominion botanist* or government naturalist of Canada; remained with CGS (1881-1912); became charter member of Royal Society of Canada (1882); became assistant director of CGS (1887); published *Catalogue of Canadian Plants* (1883-1902) and *Catalogue of Canadian Birds* with his son James; published *The Forests of Canada and their Distribution*

(1895); did field work each summer even after a severe stroke in 1912; retired to Vancouver Island; over 100,000 plant specimens at National Herbarium in Ottawa; died June 18th 1920 in Sidney, British Columbia; buried at Beechwood Cemetery in Ottawa; Macoun Marsh on cemetery property named for him; eponyms: *Carex macounii* (Dewey,1866) Macoun Sedge; *Elymus macounii* (Vasey,1886) Macoun Wild Rye; *Epilobium leptocarpum* (Haussknecht,1884) var. *macounii* (Trelease,1891) Macoun Fireweed; *Gentiana macounii* (T.Holm,1901) Macoun Gentian; *Potamogeton filiformis* (Persoon,1805) var. *macounii* [Morong ex Macoun,1888] (Morong,1893) {=*Potamogeton marinus* var. *macounii* (Morong ex Macoun,1888)} Macoun Pondweed; *Packera macounii* [E.L.Greene, 1897] (W.A.Weber+Á.Löve,1981) {=*Senecio macounii* (E.L.Greene, 1897)} Macoun Ragwort, Groundsel; *Pseudognaphalium macounii* [E.L. Greene,1902] (Kartesz,1999) {=*Gnaphalium macounii* (E.L.Greene,1902)} Winged Cudweed, Macoun Everlasting; *Ranunculus macounii* (Britton,1892) Macoun Buttercup; *Salix cordifolia* (Pursh,1814) var. *macounii* [Rydberg,1899] (C.K.Schneider,1918) {=*Salix macounii* (Rydberg, 1899)} Macoun Willow; *Sisyrinchium macounii* (E.P.Bicknell,1900) Macoun Blue-Eyed Grass; also Mount Macoun in Selkirk Range in British Columbia

MAURANDY, Catalina Pancratia (18th century); Spanish botanist and physician; professor of botany at Cartagena, Spain; married Spanish physician and botanist Agustín Juan y Poveda, director of Cartagena Botanic Garden; eponyms: *Maurandya* (Ortega,1797) Roving Sailor, Snap Dragon Vine; *M.antirrhiniflora* (Humboldt+Bonpland ex Willdenow,1806) Little Snapdragon Vine

McMAHON, Bernard (c.1775-1816); American nurseryman and horticulturist; gardening mentor of Thomas Jefferson; name also spelled M'Mahon and Mahon; born in Ireland; moved to Philadelphia to escape political persecution (1796); established seed house and nursery (1802); published first United States seed catalogue: *Catalogue of Garden, Grass, Herb, Flower, Tree & Shrub-seeds, Flower Roots*, with 720 species and varieties (c.1803); published second catalogue with native American seeds (1804); published comprehensive garden book: *American Gardener's Calendar*; classic work used by Jefferson at Monticello (1806); eleven editions (1806-1857); forwarded new vegetable and flower varieties to Jefferson; entrusted as curator of seeds and plants collected by Lewis and Clark expedition (1806); included golden currant *Ribes aureum*, snowberry *Symphoricarpos albus*, Osage orange *Maclura pomifera* and twenty-five other new species; purchased twenty acres to expand nursery and botanic garden (1808); corresponded frequently (37 letters) with Jefferson (1808-1816); essay on landscape design *Ornamental Designs and Plantings* inspired oval flower beds on West Lawn at Monticello; died (1816); eponyms: *Mahonia* (Nuttall,1818) Oregon Grape; *Berberis haematocarpa* (Wooton, 1898) {=*Mahonia haematocarpa* [Wooton,1898] (Fedde,1901) Red Barberry, McMahan Barberry, Algarita

MENTZEL, Christian (1622-1701); early German physician, botanist, philologist and Chinese scholar; name also spelled Christianus MENTZELIUS in Latin; born June 22nd 1622 in Fürstenwalde, Germany; personal physician to Prince Regent Friedrich Wilhelm, Elector of Brandenburg; member of Leopoldian Academy; first book *Flora Danzig* used both Latin and

German descriptions (1650); compiled three volume *Theatri Rerum Naturalium Brasiliae* [Natural History of Brasil] (1660-1664) today held at Biblioteka Jagiellonska, Cracow, Poland; artists Albert van der Eckhout (1610-1666), Frans Post (1612-1680) and Georg Marcgraf (1610-1644) spent seven years (1637-1644) recording fauna and flora in northeastern Brazil for Count Maurice of Nassau, Governor-General of Dutch Brazil (1604-1679); in 1652 Nassau sent 400 drawings and sketches to Mentzel via Friedrich Wilhelm; published *Index Nominum Plantarum Universalis Multilinguis* [Universal Index of Plants] (1682) which attempted to incorporate all known New World and Asian plant names including Chinese; published *Sylloge Minutiarum Lexici Latino Sinico Characteristici* [Chinese-Latin Dictionary] (1685); corresponded with Andreas Cleyer (c.1634– 1698) German botanist and physician from Kassel and Batavia; acquired 600 Japanese prints and watercolor paintings of plants purchased by Cleyer in Japan from which unpublished *Flora Japonica* compiled; died January 17th 1701 in Berlin; eponyms: *Mentzelia* (Linnaeus,1753) Stickleaf; *M.albicaulis* (A.Gray,1852) White-Stem Stickleaf, White-Stem Blazing Star; *M.multiflora* [Nuttall,1848] (A.Gray,1849) {=*Bartonia multiflora* (Nuttall, 1848)} Many-Flowered Blazing Star, Many-Flowered Stickleaf

MENZIES, Archibald (1754-1842); Scottish physician, botanist and naturalist; born March 15th 1754 at Easter Stix [Styx], Weem parish, in Perthshire and Kinross; initial schooling in Weem; worked with elder brother William at Royal Botanic Gardens; persuaded by botany professor John Hope (1725-1786) to study medicine and botany at Edinburgh University; qualified as surgeon and graduated 1781; briefly practiced medicine as physician assistant in Caernarvon, Wales; joined Royal Navy as assistant ship surgeon on *H.M.S. Nonsuch*; at Battle of Saintes (April 12th 1782); served in North America at Halifax Station in Nova Scotia; appointed surgeon on *H.M.S. Prince of Wales* under Captain James Colnett for three-year fur-trading voyage to Pacific coast of North America via Cape Horn in South America (1786-1789); first botanist to collect in Vancouver and California; accompanied by *H.M.S. Princess Royal* under Captain Duncan; visited Sandwich Islands [now Hawaii]; collected plants and tended crew; returned to England (1789); elected fellow of Linnaean Society (1790); appointed naturalist under Captain George Vancouver on voyage around world of *H.M.S. Discovery* (1790-1794) known as Vancouver Expedition; collected plants and animal specimens; took over duties when ship's surgeon fell ill; briefly visited desolate northwest side of Isabela Island in Galápagos and found *little of interest* (?!); with lieutenant Joseph Baker and two others climbed Mauna Loa [13,680 feet] in Hawaii (1794); brought back dry specimens, seeds and live plants cultured in glass frames on deck; introduced Monkey Puzzle Tree *Araucaria araucana* to England from seeds collected in Chile; presented specimens to Sir Joseph BANKS (1743-1820) at Kew Gardens; after voyage, served with Navy in West Indies; retired from Navy and awarded medical doctorate by Aberdeen University (1799); practiced medicine at Notting Hill in London (1800-1842); wife died (1837); they had no children; died February 15th 1842 in London; buried in Kensal Green cemetery; eponyms: *Menziesia* (J.E.Smith,1791) Mock Azalea; *Abutilon menziesii* (Seemann, 1865) Menzies Indian Mallow; *Amsinckia menziesii* [Lehmann,1830] (A.Nelson+J.F. Macbride, 1916) {=*Echium menziesii* (Lehmann,1830)} Menzies Fiddleneck; *Arbutus menziesii* (Pursh, 1814) Pacific Madrone, Menzies Arbutus; *Bonamia menziesii* (A.Gray,1862) Menzies Bonamia; *Chimaphila menziesii* [R.Brown,1824] (Sprengel,1825) {=*Pyrola menziesii* (R.Brown, 1824)}

Menzies Pipsissewa; *Delphinium menziesii* (DeCandolle,1817) Menzies Larkspur; *Lepidium menziesii* (DeCandolle,1821) Menzies Pepper Grass; *Nothofagus menziesii* [J.D. Hooker,1844] (Oersted,1873) {=*Fagus menziesii* (J.D.Hooker, 1844)} Menzies Southern Beech; *Pseudotsuga menziesii* [Mirbel, 1825] (Franco,1950) {=*Abies menziesii* (Mirbel,1825)} Douglas Fir; *Ribes menziesii* (Pursh,1814) Menzies Currant, Menzies Gooseberry; *Tolmiea menziesii* [Pursh,1814] (Torrey+A.Gray,1840) {=*Tiarella menziesii* (Pursh,1814)} Menzies Youth on Age; also Mount Menzies, Menzies Bay, Menzies Island and Menzies Point in British Columbia named in his honor

MERTENS, Franz Karl [Carl] (1764-1831); German botanist; born April 3rd 1764 in Bielefeld; father Clamor Mertens only son of impoverished noble family; schooling: home taught by father; mother arranged classes through city officials; intelligence and industry gained financial assistance; studied theology and language at Halle University; offered teaching post at Bremen Polytechnic College; studied botany in spare time; through friend met Albrecht Wilhelm Roth (1757–1834) German physician and botanist at Oldenburg; together with Roth undertook collecting trips, especially in Scandinavia, visited botanists and viewed botanical gardens; discovered and described several new algae species; became full professor at Bremen; specialized in algae studies or algology; illustrated algae in third volume of *Catalecta Botanica* by Roth (1806); edited with co-author Wilhelm Daniel Joseph KOCH (1771-1849) professor of botany at Erlangen, elaborate five volume edition of *Deutschlands Flora* [Flora of Germany] (1823-1831) originally written by German botanist Johann Christoph Röhlings (1757-1813); collected large private herbarium; exchanged letters and specimens with many contemporary botanists; died June 19th 1831; via American botanist Mildred Mathias (1906– 1995) Los Angeles descendants sold letter collection to Hunt Botanical Library Archives (April 1962); included letters from: Stephen Elliott, Edward Forster, Carl Adolphe Agardh, Bory de Saint-Vincent, Augustin Pyramus de Candolle, Adelbert Chamisso, Louis August Deschamps, Rene Louiche Defontaines, Ambrose Palisot de Beauvois, Alexander Postels and Dawson Turner; eponyms: *Mertensia* (Roth,1797) BlueBells, LungWort; *M.franciscana* (A.Heller,1899) Franciscan BlueBells

METCALFE, Orrick Baylor (1879-1936); American botanist, plant collector, and plant ecologist; resided in Mangas Springs and Silver City in southwestern New Mexico; collected in New Mexico in Black Range and Mimbres Valley (1902-1904); student of Elmer Otis Wootton at New Mexico College of Agricultural and Mechanical Arts in Las Cruces [now New Mexico State University]; senior thesis on flora of Mesilla Valley (1903); masters thesis on soil analysis and tension line in Mesilla Valley between saltbush *Atriplex canescens* and creosote bush *Larrea tridentata*; taught auto mechanics at State College; entered auto business in Silver City; worked in local mining operations; killed in bizarre mine accident; eponyms: *Muhlenbergia metcalfei* (M.E.Jones,1912) Metcalfe Muhly Grass

MONARDES, Nicolás Bautista (c.1493-1588); early Spanish botanist and physician; name also spelled MONARDUS; born in Seville; scant biographical information available; studied humanistic subjects and medicine; first in Alcalá, then at University of Seville; graduated (c.

1547); worked as doctor in Seville; books: *Diálogo Llamado Pharmacodilosis* (1536) – about humanism and classical authors, mainly Pedanios Dioscorides; *De Secanda Vena in Pleuriti Inter Grecos et Arabes Concordia* (1539) – about Greek and Arab medicine; *De Rosa et Partibus Eius* (1540) – about roses and citrus fruits; most significant and well-known work: *Historia Medicinal de las Cosas que se Traen de Nuestras Indias Occidentales* – about medicinal plants from New World; published in three parts with varying titles 1569, 1571, 1574; reprinted in one volume in 1580, with 42 subsequent editions; translated into six languages, including Latin by Charles de l'Écluse and English by John Frampton as *Joyful News out of the New Found World*; the 1569 version contained first illustration of tobacco (*Nicotiana*); died October 10th 1588; eponyms: *Monarda* (Linnaeus, 1753) Bee Balm, Horse Mint, Oswego Tea, Bergamot, Pagoda Plant; *M.fistulosa* (Linnaeus, 1753) var. *menthifolia* [Graham, 1829] (Fernald, 1944) {=*Monarda menthifolia* (Graham, 1829)} Bergamot, Oswego Tea; *M.pectinata* (Nuttall, 1847) Pagoda Plant; *M.punctata* (Linnaeus, 1753) var. *occidentalis* [Epling, 1935] (E.J.Palmer+ Steyermark, 1935) {=*M.punctata* subsp. *occidentalis* (Epling, 1935)} Spotted Pagoda Plant, Spotted BeeBalm, Spotted Horse Mint

MUHLENBERG, Gotthilf Heinrich Ernst (1753-1815); American botanist, clergyman, chemist and mineralogist; also known as Henry Muhlenberg; name also spelled MUEHLENBERG; born November 17th 1753 in New Providence [Trappe] Pennsylvania; son of Heinrich Melchoir Muhlenberg (1711-1787) noted Lutheran minister; during American Revolution (1775-1783) one brother in Continental Army; another in Continental Congress and first Speaker of House of Representatives; studied in Europe at Halle University; traveled in Germany and England; began to study botany (c.1779); became Lutheran minister and pastor of Holy Trinity Church in Lancaster, Pennsylvania (1780-1815); helped create Franklin College [now Franklin & Marshall College] in Lancaster; elected first president (1787-1815); established courses in geography, composition, oratory, chemistry and natural science; became famous as *The American Linnaeus*; classified and named 150 species in *Index Flora Lancastriensis* (1785); collaborated with noted European botanists; published first German-English Dictionary in America (1812); published *Catalogus Plantarum Americae Septentrionalis* [Catalogue of North American Plants] (1813); published *Descriptio Uberior Graminum et Plantarum Calamariarum Americae Septentrionalis Indiginarum et Cicurum* (1817) – first comprehensive American study of *Poaceae* [=Gramineae] grass family; eponyms: *Muhlenbergia* (Schreber, 1789) Muhly Grass; *M.arenicola* (Buckley, 1862) Sand Muhly Grass; *M.dubia* (E.Fournier, 1885) Pine Muhly Grass; *M. emersleyi* (Vasey, 1892) Bull Grass, Emersley Muhly Grass; *M. fragilis* (Swallen, 1947) Delicate Muhly Grass; *M.longiligula* (Hitchcock, 1934) Long-Tongue Muhly Grass; *M.metcalfei* (M.E.Jones, 1912) Metcalfe Muhly Grass; *M.pauciflora* (Buckley, 1862) New Mexico Muhly Grass; *M.porteri* (Scribner ex Beal, 1896) Bush Muhly Grass, Porter Muhly Grass; *M.repens* [J.Presl, 1830] (Hitchcock, 1912) {=*Sporobolus repens* (J.Presl, 1830)} Creeping Muhly Grass; *M.rigens* [Bentham, 1881] (Hitchcock, 1932) {=*Epicampes rigens* (Bentham, 1881)} Deer Grass, Deer Muhly Grass; *M.sinuosa* (Swallen, 1947) Barrens Muhly Grass; *M.straminea* (Hitchcock, 1913) Screw-Leaf Muhly Grass; *M.torreyana* [Schultes, 1824] (Hitchcock, 1934) {=*Agrostis torreyana* (Schultes, 1824)} Torrey Muhly Grass; *M.torreyi* [Kunth, 1833] (Hitchcock ex Bush, 1919) {=*Agrostis torreyi* (Kunth, 1833)} Ring Muhly Grass, Torrey Muhly Grass; *M.wrightii* (Vasey ex

J.M.Coulter,1885) Spike Muhly Grass, Wright Muhly Grass; *Amphicarpum muhlenbergianum* [Schultes,1824] (Hitchcock,1932) {=*Milium muhlenbergianum* (Schultes,1824)} Muhlenberg Double-Spike Grass; *Cacalia muehlenbergii* [Schultz-Bipontinus,1845] (Fernald, 1938) {=*Senecio muehlenbergii* (Schultz-Bipontinus,1845)] Muhlenberg Matarique, Muhlenberg Indian Plantain; *Carex muehlenbergii* (Schkuhr ex Willdenow,1805) Muhlenberg Sedge; *Paspalum ciliatifolium* (Michaux,1803) var. *muhlenbergii* [Nash,1901] (Fernald,1934) {=*Paspalum muhlenbergii* (Nash,1901)} Muhlenberg Paspalum Grass; *Quercus muehlenbergii* (Engelmann,1877) Muhlenberg Oak; *Scleria muehlenbergii* (Steudel,1841) Muhlenberg Nut-Grass Sedge

MUNRO, William (1818-1880); English career army officer, botanist and agrostologist; eldest son of William Munro of Druids Stoke, Gloucestershire; combined military duties with study of grasses; entered army as ensign (January 20th 1834), became lieutenant (April 1836); published *Discovery of Fossil Plants at Kamptee* (1842); severely wounded at battle of Maharajpore when regiment suffered heavy losses (December 24th 1843); became captain (July 2nd 1844); published *On Antidotes to Snake-bites* (1848); published *Report on Timber Trees of Bengal* (1849); became major (May 7th 1852); became lieutenant-colonel (November 11th 1853); commanded regiment at siege of Sevastopol in southern Russia (September 1854 to September 1855) including attack on Redan (June 18th 1855); received Legion of Honor medal; received English and Turkish Crimean medals; commanded 39th regiment in Canada and Bermuda; published *An Identification of Grasses in the Linnaeus Herbarium* (1862); published *Characters of New Grasses collected at Hong Kong by Mr. Charles Wright in the North Pacific Exploring Expedition* (1857-1860); became major-general (March 6th 1868); published *Monograph on Bamboos* (1868); commanded troops in West Indies (1870-1876); became lieutenant-general (February 10th 1876); appointed honorary colonel of 93rd highlanders (October 11th 1876); became full general (June 25th 1878); retired at Taunton; attempted complete general monograph of *Gramineae* (grass family) [now *Poaceae*] but not completed; died January 29th 1880 in Taunton; eponyms: *Munroa* (Torrey,1857) False Buffalo Grass; *M.squarrosa* [Nuttall,1818] (Torrey,1857) {=*Crypsis squarrosa* (Nuttall, 1818)} Munro False Buffalo Grass; *Elaeocarpus munroii* (Masters in Thomson+J.D.Hooker, 1872) Munro Elaeocarpus

NICOT, Jean (1530-1600); French diplomat and scholar; born in Nîmes in southern France; at 29, sent to Portugal to negotiate marriage between six-year-old Princess Marguerite de Valois to five-year-old King Sebastian of Portugal (1559); became French ambassador to Portugal (1559-1561); first described medicinal properties of tobacco in letters sent to French court (1559); sent seeds from Lisbon to France for Catherine de Medici (queen mother) for use as medicine (1560); returned to France, brought tobacco plants and introduced snuff to French court (1561); Catherine became instant convert [i.e. addict]; plant accepted by Father Superior of Malta, who shared tobacco with monks; tobacco became fashionable rage in Paris; Nicot became famous; tobacco plant previously used ceremonially in Americas for millennia; seen by Columbus on first voyage; spread by Spanish, Portuguese and Dutch sailors; Nicot also later compiled French dictionary: *Thresor de la Langue Françoise tant Ancienne que Moderne* (published posthumously in 1606); died May 4th 1600; eponyms: *Nicotiana* (Linnaeus,1753)

Tobacco; *N.trigonophylla* (Dunal,1852) Desert Tobacco; active ingredient nicotine also named for him

NOLIN, Abbé C. P. (18th century); French arboriculturist and cleric; director of French royal nurseries; joint author of agricultural essay published in 1755; no other information presently available; eponyms: *Nolinacea* (Nakai,1943) Bear Grass Family; *Nolina* (Michaux,1803) Bear Grass; *N.microcarpa* (S.Watson, 1879) Bear Grass, Small-Fruited Bear Grass

NUTTALL, Thomas (1786-1859); English born American botanist, ornithologist and plant collector; born January 5th 1786 in Long Preston, near Settle in West Riding of Yorkshire County; worked as apprentice printer; emigrated to United States (1808); met professor Benjamin Smith Barton in Philadelphia who encouraged an interest in botany (1808); traveled to Great Lakes (1810); traveled on Astor Expedition under William Price Hunt on behalf of John Jacob Astor up Missouri River (1811); accompanied by English botanist John Bradbury plant collector for Liverpool Botanic Garden; both separated from expedition at Arikara Indian trading post in South Dakota and continued together upriver with Ramsay Crooks; returned to trading post in August; joined Manuel Lisa and returned to St. Louis; war of 1812 between Great Britain and United States imminent; returned to London via New Orleans; organized collections and discussed results with other botanists; returned to United States (1815); published *The Genera of North American Plants* (1818); traveled along Arkansas and Red Rivers (1818-1820); returned to Philadelphia; published *Journal of Travels into the Arkansas Territory* (1821); became professor of botany and curator of botanic garden at Harvard University (1825-1834); published *Manual of the Ornithology of the United States and of Canada* (1832-1834); resigned from Harvard and joined new expedition led by Nathaniel Jarvis Wyeth and accompanied by John Kirk Townsend (1834); traveled through Kansas, Wyoming, Utah and Snake River to Columbia River; sailed to Hawaii (December 1834); returned to San Francisco (Spring 1835); collected in California south to San Diego (1835); met author Richard Henry Dana, Jr. in San Diego; character *Old Curious* in book *Two Years Before the Mast* modeled on Nuttall; worked at Academy of Natural Sciences in Philadelphia (1836-1841); made contributions to *Flora of North America* by Asa GRAY (1810-1888) and John TORREY (1796-1873); published *North American Sylva* (1841) first attempt to describe all North American trees; returned to England after uncle died (December 1841); inherited property and remained in England; died September 10th 1859 in St Helens, Lancashire; buried at Christ Church in nearby village of Eccleston, Merseyside; eponyms: *Astragalus nuttallianus* (DeCandolle,1825) Nuttall Locoweed; *Calochortus nuttallii* (Torrey, 1852) Nuttall Mariposa Lily; *Callitriche nuttallii* (Torrey,1857) {=*Callitriche pedunculosa* (Nuttall,1835)} Nuttall Water StarWort; *Carya ovata* [Miller,1768] (K.Koch,1869) {=*Juglans ovata* (Miller,1768)} var. *nuttallii* (Sargent,1913) Nuttall Hickory; *Chamaerhodos nuttallii* [Torrey+A.Gray,1840] (Pickering ex Rydberg,1908) {=*Chamaerhodos erecta* var. *nuttallii* (Torrey+A.Gray,1840)} Nuttall Ground Rose; *Cirsium nuttallii* (DeCandolle,[1837],1838) Nuttall Thistle; *Cornus nuttallii* (Audibon ex Torrey+A.Gray,1840) Nuttall Dogwood, Pacific Dogwood; *Delphinium nuttallianum* (Pritzell,1842) Nuttall Larkspur; *Desmodium nuttallii* [Schindler,1927] (B.G.Schubert, 1950) {=*Meibomia nuttallii* (Schindler,1927)} Nuttall Tick Clover; *Elodea nuttallii* [Planchon,1848] (H.Saint-John,1920) {=*Anacharis nuttallii* (Planchon,

1848)} Nuttall Water Weed; *Evolvulus nuttallianus* (Roemer+Schultes,1820) Nuttall Spreading Bindweed; *Haplopappus nuttallii* (Torrey+A.Gray,1842) Nuttall False Damiana; *Lespedeza nuttallii* (Darlington,1826) Nuttall Bush Clover; *Linanthus nuttallii* [A.Gray,1870] (E.L.Greene ex Milliken,1904) {=*Gilia nuttallii* (A.Gray,1870)} Nuttall Flax-Flowered Gilia; *Lobelia nuttallii* (Roemer+Schultes,1819) Nuttall Cardinal Flower; *Lomatium nuttallii* [A.Gray,1870] (J.F.MacBride,1918) {=*Seseli nuttallii* (A.Gray,1870) Nuttall Biscuit Root; *Mimosa nuttallii* [DeCandolle,1825] (B.L.Turner,1994) {=*Leptoglottis nuttallii* (DeCandolle,1825) Catclaw Briar, Nuttall Mimosa; *Monolepis nuttalliana* [Schultes,1822] (E.L.Greene,1891) {=*Blitum nuttallianum* (Schultes,1822) Nuttall Patata; *Oenothera nuttallii* (Sweet, 1830) Nuttall Evening PrimRose; *Polygala nuttallii* (Torrey+A. Gray,1840) Nuttall MilkWort; *Polytaenia nuttallii* (DeCandolle, 1829) Nuttall Prairie Parsley; *Potamogeton nuttallii* (Chamisso+ Schlechtendal, 1827) Nuttall Pondweed; *Ptilimnium nuttallii* [DeCandolle,1829] (Britton,1894) {=*Discopleura nuttallii* (DeCandolle,1829)} Nuttall Mock BishopWeed; *Puccinellia nuttalliana* [Schultes,1824] (Hitchcock,1912) {=*Poa nuttalliana* (Schultes, 1824)} Nuttall Alkali Grass, Nuttall Goose Grass; *Quercus texana* (Buckley,1861) {=*Quercus nuttallii* (E.J.Palmer,1927)} Texas Oak, Nuttall Oak; *Schrankia nuttallii* [DeCandolle ex Britton+Rose, 1928] (Standley,1930) {=*Leptoglottis nuttallii* (DeCandolle ex Britton+Rose,1928)} Nuttall Sensitive Briar; *Sedum nuttallii* (Torrey+E.James ex Eaton,1829) {=*Sedum nuttallianum* (Rafinesque, 1832)} Nuttall Stonecrop; *Solidago graminifolia* [Linnaeus,1753] (Salisbury,1812) {=*Chrysocoma graminifolia* (Linnaeus,1753)} var. *nuttallii* [E.L.Greene,1902] (Fernald,1908) {=*Euthamia nuttallii* (E.L.Greene,1902)} Nuttall Goldenrod; *Stachys nuttallii* (Shuttleworth ex Bentham,1848) Nuttall Woundwort; *Zigadenus nuttallii* [A.Gray,1837] (S.Watson,1871) {=*Amianthium nuttallii* (A.Gray, 1837)} Nuttall Death Cammas; also birds: *Picoides nuttallii* (Gambel,1843) Nuttall Woodpecker; *Pica nuttalli* (Audubon,1837) Nuttall Yellow-Billed Magpie; *Phalaenoptilus nuttallii* (Audubon, 1844) Nuttall Whippoorwill

ORCUTT, Charles Russell (1864-1929); American botanist and plant collector; born in Hartland, Vermont; youngest of five sons; father Heman C. Orcutt farmer and horticulturalist; mother Eliza Gray Orcutt accomplished poetess; home taught; moved to San Diego with parents and one surviving brother (1879); family bought land near Mission San Diego de Alcalá ruins and started a nursery; father and son explored and collected throughout San Diego area; visited Cuyamaca, Soda Springs, Campo and Borrego; father and son joined expedition led by Charles PARRY (1823-1890) to Ensenada in Baja California (1882); joined San Diego Society of Natural History (June 1885); became interested in seashells; began to write and publish *The West American Scientist* (1884-1919); father died (early 1892); temporarily ceased journal publication from grief; married Olive E. Eddy, young doctor from Michigan (late 1892); honeymoon horseback ride from Pasadena to San Jacinto and San Diego collecting plants; settled in San Diego and built house; had four children (1892-1898); studied Mexican and Californian cacti; grew cacti on San Diego property; away from home frequently on continued expeditions; wife provided money via medical practice; after 1922 wrote many letters but rarely returned home; collected in Texas, Arizona and Mexico usually alone; relied on local charity; letters home requested money; shipped plants to large herbariums with postage due; treasures accumulated in warehouses; decided to donate entire collection to San Diego Society of Natural History (1918)

but agreement delayed ten years; published: *Cactography* (1926); moved permanently to Jamaica (1927); sent material to Philadelphia Academy of Science, American Museum of Natural History, San Diego Museum of Natural History, Scripps Institution of Oceanography and Smithsonian Institute; Smithsonian sent money for new specimens from Haiti; traveled to Haiti but became gravely ill; died August 25th 1929; eponyms: *Orcuttia* (Vasey,1886) Orcutt Grass; *Aristida schiedeana* (Trinius+Ruprecht,1842) var. *orcuttiana* [Vasey,1886] (Allred+Valdés-Reyna,1995) {=*Aristida orcuttiana* (Vasey,1886)} Single Three-Awn Grass, Orcutt Three-Awn Grass; *Bromus orcuttianus* (Vasey,1885) Orcutt Brome Grass; *Eragrostis orcuttiana* (Vasey, 1893) Orcutt Love Grass; nineteen seashell species also named in his honor

PACKER, John G. (1929-); Canadian biosystematist and botanist; studied Arctic and alpine ecosystems; wrote: *Polyploidy and Environment in Arctic Alaska* (1965); wrote: *Flora of Alberta* with E. H. Moss (November 1st 1983); studied *Arctostaphylos uva-ursi* (bearberry) with K. E. Denford; currently working on *Flora of North America*; eponyms: *Packera* (Á.Löve+D.Löve, [1975], 1976) {~*Senecio* (Linnaeus,1753)}; *P.neomexicana* [A.Gray,1884] (W.A.Weber+Á.Löve, 1981) {=*Senecio neomexicana* (A.Gray,1884)} New Mexico Groundsel

PALMER, Edward (c.1830-1911); English born American botanist, naturalist, explorer, archaeologist, ethnobotanist and plant collector; born January 12th 1830 near Hockwold-Wilton, Norfolk County, England; [dates 1829 and 1831 also cited]; father William or Robert Palmer a gardener; mother Mary Ann Armiger; childhood events uncertain; self-taught; traveled to United States (1849); moved to Cleveland and met scientist Jared Potter Kirtland who encouraged interest in natural science, especially botany and anthropology; collected on Thomas Jefferson Page anthropology expedition of United States Navy to Rio de la Plata in South America (1852-1855); married Dinah Riches while visiting England (1855); returned together to United States but nothing further known about her; attended Cleveland Homeopathic College (1856-1857) but received no degree; joined U.S. Army as assistant surgeon and served in Colorado, Kansas and Arizona (1862-1868); became one of the most prolific plant and artifact collector of nineteenth century; traveled and collected in southwestern United States, Mexico, Bahamas, Idaho, Florida and Maine; sponsors included Harvard University and Smithsonian Institute (1868-1873); worked for United States Department of Agriculture as professional archeologist at Pueblo ruins in St. George, Utah (1873-1874); plant collector in Texas and Mexico (1875); hired by Smithsonian Institute – Bureau of American Ethnology – Mound Exploration Division, to work at Coyotero Apache mound site in Arkansas (1881); surveyed Indian mounds in Alabama, Louisiana, Mississippi and Tennessee (1882-1884); investigated Kolomoki mound site in Early County, Georgia (1884); returned to plant collecting (1884-1910); led expedition to explore flora and fauna of California, particularly Death Valley (1891); collected again in Mexico and southwestern United States, also in Paraguay and on Guadeloupe Island; died April 10th 1911; buried in Rock Creek Cemetery in Washington, D.C.; collections reside in United States National Museum; over 200 plant species named in his honor; eponyms: *Palmeria* (F.Mueller,1864) tropical plants from New Guinea and Australia in *Monimiaceae*; *Palmerella* (A.Gray,1876) plants similar to *Lobelia*; *Agave palmeri* (Engelmann,1875) Palmer Agave; *Agropyron smithii* (Rydberg,1900) var. *palmeri* [Scribner+ J.G.Smith,1897] (A.Heller,

1900) {=*Agropyron spicatum* var. *palmeri* (Scribner+J.G.Smith,1897)} Palmer Wheat Grass; *Amaranthus palmeri* (S.Watson,1877) Palmer Pigweed; *Bombax palmeri* (S.Watson,1887) Palmer Silk Cotton; *Cephalocereus palmeri* (Rose,1909) Palmer Old Man Cactus; *Eragrostis palmeri* (S.Watson,1883) Palmer Love Grass; *Guaiacum palmeri* (Vail,1910) Palmer Guaiacum; *Haplopappus palmeri* (A.Gray,1876) Palmer False Damiana; *Krameria palmeri* (Rose,1895) Palmer Rhatany; *Lippia palmeri* (S.Watson,1889) Palmer BeeBush; *Piper palmeri* (C.DeCandolle,1895) Palmer Pepper

PARRY, Charles Christopher (1823-1890); British born American physician, botanist, plant collector, explorer and mountaineer; born August 28th 1823 in Gloucestershire, England; descended from many Church of England clergy; emigrated to United States with parents and settled in rural upstate New York (1832); studied botany at Union College; studied medicine at Columbia University; studied botany with John TORREY (1796-1873) and medicine at College of Physicians and Surgeons in New York; graduated (1846); also studied botany with Asa GRAY (1810-1888) and George ENGELMANN (1809-1884); moved to Davenport, Iowa (1846); set up office but practiced medicine only briefly (1847); joined survey party in central Iowa as botanist (1847); joined Mexican Boundary Survey (1848-1855) as surgeon and botanist; collected extensively along Mexican border and California; discovered and described rare *Pinus torreyana* (Torrey pine) in southern California and named it for mentor John Torrey (1850); first wife died after five years of marriage and only daughter also died; second marriage (1859) lasted until he died in 1890; after Civil War, spent summers in Colorado describing towns and plants for Chicago Evening Journal (1865-1869); worked as botanist for United States Department of Agriculture (1869-1871); joined numerous exploring expeditions in Colorado, Utah, Texas, New Mexico, Arizona, California, Oregon and Rocky Mountains; described many previously unknown species; collected over 30,000 unique specimens; over 80 Colorado species described from his collections; discovered *Picea engelmannii* (Engelmann spruce) and named it for his mentor; considered king of Colorado botany; made first ascent of several high Colorado peaks and measured elevations by barometer; second botanist to climb Pikes Peak (after Edwin JAMES (1797-1861) in 1820); named many peaks for mentors and fellow naturalists – Torrey Peak, Gray Peak, James Peak, Mount Engelmann, Mount Guyot, Mount Audubon; named Parry Peak after himself and Mount Eva after his wife; concerned about lack of tree protection; writings (after 1883) helped establish Torrey Pines State Reserve north of San Diego; died February 20th 1890; collections at Iowa State University; eponyms: *Parryella* (Torrey+A.Gray,1868) member of *Fabaceae* in Mexico; *Agave parryi* (Engelmann,1875) Parry Agave; *Arnica parryi* (A.Gray, 1874) Parry Arnica; *Bouteloua parryi* [E. Fournier,1886] (Griffiths,1912) {=*Chondrosium parryi* (E.Fournier, 1886)} Parry Grama Grass; *Campanula parryi* (A.Gray,1886) Parry Bellflower; *Chrysothamnus parryi* [A.Gray,1864] (E.L.Greene,1895) {=*Linosyris parryi* (A.Gray,1864)} Parry Rabbit Brush; *Danthonia parryi* (Scribner,1896) Parry Oat Grass; *Delphinium parryi* (A. Gray,1887) Parry Larkspur; *Eriodictyon parryi* [A.Gray,1876] (E.L. Greene,1889) {=*Nama parryi* (A.Gray,1876)} Parry Yerba Santa; *Nolina parryi* (S.Watson,1879) Parry Bear Grass; *Opuntia parryi* (Engelmann,1852) Parry Prickly Pear; *Pedicularis parryi* (A.Gray, 1862) Parry Lousewort; *Penstemon parryi* [A.Gray,1859] (A.Gray, 1878) {=*Penstemon puniceus* var. *parryi* (A.Gray,1859)} Parry Beard Tongue; *Pinus parryana* (Engelmann,1862) Parry Pinyon; *Primula*

parryi (A.Gray,1862) Parry Primrose; *Townsendia parryi* (D.C. Eaton,1874) Parry Townsend Daisy; Parry Peak in Colorado (13,391 feet) also named in his honor

PEREZ, L. (16th century); early Spanish medical botanist who lived in Toledo, Spain; no other information available; eponyms: *Perezia* (Lagasca,1811); South American species retained in *Perezia* and North American species separated into *Acourtia* (D.Don,1830); Brownfoot, Desert Peony; see also: ACOURT

POPE, Captain John G. Pope (?-?); leader of Pacific Railroad Survey to explore southern route along 32nd parallel (1853-1855); line now forms east-west boundary between southern New Mexico and western Texas; started at Dona Ana [now ? Las Cruces] on Rio Grande and traveled east; simultaneously, Lieutenant J. G. Parke carried line from Pima villages on Gila River in central Arizona east to Rio Grande; Emory expedition (1846-1847) had already crossed western Arizona from Pima villages to Colorado River; organized at Albuquerque, New Mexico; reached Dona Ana (January 16th 1854); surveyed Mesilla Valley; crossed Hueco Mountains; traveled south of Guadalupe Mountains to Pecos River; reached Big Springs, Texas; crossed Colorado River of Texas, crossed Brazos and Trinity Rivers, scouted near Sulphur Springs, Texas; traveled northeast to Red River; also led Artesian Well Boring Expedition (1855-1858); eponyms: *Phacelia popei* (Torrey+A.Gray,1855) Pope Scorpion Weed

PORTER, Thomas Conrad (1822-1901); American botanist, poet and classicist; born January 22nd 1822 in Alexandria, Huntingdon County, Pennsylvania; studied at Harrisburg Academy; graduated from Lafayette college, Easton, Pennsylvania (1840); graduated from Princeton theological seminary (1843); licensed to preach (1844); became pastor of Presbyterian Church in Monticello, Georgia (1846); became pastor of newly organized 2nd German Reformed church in Reading, Pennsylvania (1848); resigned and became professor of natural sciences at Marshall College, Mercersburg, Pennsylvania (1849); remained so after institution merged with Franklin College and moved to Lancaster, Pennsylvania (1853); secretary of board of trustees of Franklin and Marshall College (1853-1866); translated from German *Hermann und Dorothea* by Goethe (1854); translated from German *The Life and Labors of St. Augustine* by Philip Schaff (1854-1855); translated from German *The Life and Times of Ulric Zwingli* by Hottinger (1857); received doctor of divinity degree from Rutgers (1865); resigned from Franklin and Marshall to become professor of botany and zoology at Lafayette College in Easton, Pennsylvania (1866-1873) and (1876-1897); active member of committee that framed order of worship used by German Reformed Church in United States (1867); translated hymns from German and Latin for *Christ in Song* by Philip Schaff (1868); summarized flora of Pennsylvania for *Gray's Topographical Atlas of Pennsylvania* (1872); and for *Gray's Topographical Atlas of the United States* (1873); plant collector under Ferdinand Vandeveer Hayden (1829-1887) on Colorado Survey (1873-1876); used collections of Hayden and Charles Christopher PARRY made in 1861 to write with co-author John Merle Coulter *Synopsis of the Flora of Colorado* with preface by Hayden (1874); became pastor of Third Street Reformed Church in Layfayette (1877); received LL.D. degree from Franklin and Marshall (1880); resigned Third Street Reformed Church (1884); member of various scientific societies; founder and first president of Linnaean society of

Lancaster County, Pennsylvania; died quietly at home of a stroke April 21st 1901; wrote *Flora of Pennsylvania* posthumously published (1903); extensive herbarium now at Lafayette College; eponyms: *Bromus kalmii* (A.Gray,1848) var. *porteri* (J.M. Coulter,1885) {=*Bromus porteri* [J.M.Coulter, 1885] (Nash,1895)} Porter Brome Grass; *Calamagrostis porteri* (A.Gray,1862) Porter Blue Joint Grass, Porter Reed Grass; *Carex crinita* (Lamarck,1792) var. *porteri* [Olney, 1871] (Fernald,1897) {=*Carex porteri* (Olney,1871)} Porter Sedge; *Crataegus porteri* (Britton, 1900) Porter Hawthorn; *Ligusticum porteri* (J.M.Coulter+ Rose,1888) Osha, Porter Lovage; *Melica porteri* (Scribner,1885) Porter Melic Grass; *Muhlenbergia porteri* (Scribner ex Beal, 1896) Porter Muhly Grass; *Potamogeton porteri* (Fernald,1932) Porter Pondweed; *Rubus porteri* (L.H. Bailey,1941) Porter Bramble; *Viola porteriana* (Pollard, 1897) Porter Violet

POTTS, John (d.1822); English plant collector; sent to India, China and Indonesia by East India Company on recommendation of Royal Horticultural Society of London; left England January 23rd 1821 on Indiaman *General Kyd*; visited and collected around Calcutta and Bengal Province (June-August); collected at Prince of Wales Island [now Penang Island] on west coast of Malay Peninsula (September 8-11); part of cargo thrown overboard and ship run aground (September 16th); collected three species at Malacca [now Melaka] on west coast of Malay Peninsula (September 26-27); collected in Singapore (September 29th to October 1); all plants collected since Bengal thrown overboard due to typhoon (September 17th); wintered in China; passed Sunda Straits between Java and Sumatra (March 1822); reached London via Cape of Good Hope and St. Helena Island with living plants, dried specimens and pressed herbarium sheets from China (August 1822); some sheets recorded as from Sumatra probably purchased from another collector; diary dated January 1821 to January 1822 now held by R.H.S. in London made no mention of a Sumatra visit; died August 1822 in Chiswick near London; eponyms: *Pottsia* (W.J.Hooker+ Arnott,1837) *Pottsia* (*Apocynaceae*); *Bauhinia pottsii* (G.Don,1832) Potts Bauhinia; *Crocasmia pottsii* [McNab ex Baker,1877] (N.E. Brown,1932) {=*Montbretia pottsii* (McNab ex Baker,1877)} Potts Montbretia, iris relative introduced in 1877; *Croton pottsii* [Klotzsch,1853] (Mueller-Argovensis,1866) {=*Lasiogyne pottsii* (Klotzsch,1853)} Potts Doveweed; *Ferocactus pottsii* [Salm-Dyck, 1850] (Backeberg,1961) {=*Echinocactus pottsii* (Salm-Dyck,1850)} Potts Barrel Cactus; *Hoya pottsii* (J.Traill,1830) Potts Hoya; *Mammillaria pottsii* (Scheer ex Salm-Dyck,1850) Potts Nipple Cactus; *Opuntia pottsii* (Salm-Dyck,1850) Potts Prickly Pear

PURSH, Frederick [Friedrich] Traugott (1774-1820); German born American botanist; name also spelled PURSCH; born in Grossenhain, Saxony; educated at Dresden Botanic Garden; emigrated to United States (1799); worked in Philadelphia as manager of *The Woodlands* – garden of William Hamilton (1802-1805); began working with Benjamin Smith BARTON on proposed flora of North America (1805); intended to include plants collected on Lewis and Clark expedition to Pacific northwest; Barton allowed travel south to Carolinas (1805) and north to New Hampshire (1806); both three-thousand mile trips per season occurred on foot with dog and gun; proposed flora never written; Pursh moved to London; published own book using Lewis and Clark plants: *Flora Americae Septentrionalis* [Systematic Arrangement and Description of North American Plants] (1814); returned to United States and moved to Canada (1816); specimens

collected in Quebec destroyed by fire; further work impaired by ill health and alcoholism; died in poverty July 11th 1820 in Montreal; funeral expenses paid by friends; buried in Papineau Road cemetery (1820-1857); remains moved to Mount Royal Cemetery (1857); proper marker erected by members of Natural History Society of Montreal (1878); eponyms: *Purshia* (DeCandolle ex Poiret, 1816) BitterBush, Antelope Brush; *P. stansburiana* [Torrey, 1852] (Henrickson, 1986) {=*Cowania stans-buryana* (Torrey, 1852)} Stansbury Antelope Bush; *Amphicarpum purshii* (Kunth, 1829) Pursh Hog Peanut; *Artemisia borealis* (Pallas, 1776) var. *purshii* (W.J. Hooker, 1833) Pursh Wormwood; *Crotalaria purshii* (DeCandolle, 1825) Pursh Rattlebox; *Lesquerella purshii* [S. Watson, 1888] (Fernald, 1933) {=*Lesquerella arctica* var. *purshii* (S. Watson, 1888)} Pursh Bladder Pod; *Lotus purshianus* [Bentham, 1829] (F. Clements+E. Clements, 1914) {=*Hosackia purshiana* (Bentham, 1829)} Pursh Lotus; *Phacelia purshii* (Buckley, 1843) Pursh Scorpionweed; *Plantago purshii* (Roemer+Schultes, 1818) Pursh Plantain; *Polystichum braunii* (Fee, 1852) var. *purshii* (Fernald, 1928) Pursh Holly Fern; *Rhamnus purshiana* (DeCandolle, 1825) Pursh Buckthorn, Cascara Sagrada; *Ruellia purshiana* (Fernald, 1945) Pursh Ruellia; *Scirpus purshianus* (Fernald, 1942) Pursh Bulrush; *Solidago purshii* (Porter, 1894) Pursh Goldenrod

RAFINESQUE-SCHMALTZ, Constantine Samuel (1784-1842); given name in Europe; also used: Peter Hamilton RAFINESQUE in United States; pioneer, naturalist and botanist; led chaotic life, a genius sometimes close to insanity; born October 22nd 1783 in Galata near Constantinople; father F. G. Rafinesque, French merchant from Marseilles, mother M. Schmaltz from Constantinople of German descent; spent childhood in Marseilles; mostly self-taught; by age 12 knew botanical Latin and began collecting plants; by age 19 emigrated to United States (1802); met American botanists; returned to Europe and settled in Palermo, Sicily (1805); so successful in business, retired at age 25 to study natural history; briefly worked as secretary to American consul; studied Sicilian plants and fishes; son named after Carolus Linnaeus died (1815); left common-law wife and returned to United States; lost 50 boxes of books, all plant specimens and over 60,000 shells, when ship *Union* of Malta foundered off Connecticut coast (November 2nd 1815); became founding member of newly established Lyceum of Natural History in New York; collected and named over 250 new plant and animal species in *American Monthly Magazine and Critical Review* (1818); slowly rebuilt collections; became professor of botany at Transylvania University in Lexington, Kentucky (1819); gave private lessons in French and Italian; described plants and animals found on travels from Kentucky to Louisiana in *Florula Ludoviciana* (1817) but book criticized and ignored by botanists; left university after dispute with president Horace Holley (spring 1826); detractors said he placed curse on university – president died weeks later of yellow fever and main building destroyed by fire; moved to Philadelphia; gave public lectures; published somewhat successful *Medical Flora – Manual of Medical Botany of the United States of North America* (1828-1830); became interested in fauna collected on Lewis and Clark expedition; named Black-Tailed Prairie Dog (*Cynomys ludovicianus*), White-Footed Mouse (*Peromyscus leucopus*) and Mule Deer (*Odocoileus hemionus*); brilliant, eccentric, inconsistent and profligate author of binomials; many names used with untraceable or unexplained derivations; proposed hundreds of new genera and thousands of new species, especially in *New Flora and Botany of North America* (1836) and *Flora Telluriana*

(1836-1838); most names not accepted; understood variation through time would develop new species, but couldn't explain basic cause of variation; hinted at mutation; thus, near to theory of evolution before Darwin; tablets named *Walam Olum* giving account of ancient Lenape (Delaware) Indian migrations published in volume one of *The American Nations* (1836); original copy lost; notes gave only record of evidence; for over a century widely accepted as authentic; linguistic-archaeological analyses (1980 onwards) now claim account fabricated; was he a perpetrator or a victim of a hoax?; some still claim *Walam Olum* authentic; listed over 500 archaeology sites in Ohio Valley; many never excavated and since destroyed; measured, sketched and described 148 sites in Kentucky later included in *Ancient Monuments of Mississippi Valley* (1848) by E.G.Squier and Davis; named ancient language spoken on Hispaniola as *Taino*; presumed wrongly ancient Mayan script alphabetical; died September 18th 1840 in Philadelphia of stomach cancer; buried by friends in Ronaldson cemetery; collections sold or destroyed; remains moved to Transylvania University (March 1924); eponyms: *Rafinesquia* (Nuttall,1841); *R.californica* (Nuttall,1841) California Plumeseed, California Chicory; *R.neomexicana* (A.Gray, 1853) Desert Chicory, Desert Plumeseed; *Viburnum rafinesquianum* (Schultes,1830?) Rafinesque BlackHaw-CrampBark; *Viola kitaibeliana* (Roemer+Schultes,1828?) var. *rafinesquii* [E.L.Greene,1899] (Fernald,1838) {=*Viola rafinesquei* (E.L.Greene,1899)} Rafinesque Violet

REEVES, Robert Gatlin (1898- ?) American botanist; studied corn and related grasses; wrote *Flora of South Central Texas* with Douglas Cogburn Bain (1947); eponyms: *Cystopteris reevesiana* (Lellinger,1981) {=*Cystopteris fragilis* [Linnaeus,1753] (Bernhardi,1805) subsp. *tenuifolia* (Clute,1908)} Reeves Bladder Fern, Reeves Brittle Fern, Southwestern Brittle Fern

RICHARDSON, Sir John (1787-1865); Scottish botanist, naval surgeon, naturalist, ichthyologist and arctic explorer; born November 5th 1787 in Dumfries; studied medicine at Edinburgh; became naval surgeon (1807); traveled as surgeon, zoologist and botanist on Captain Sir John Franklin's first expedition to arctic North America looking for a Northwest Passage (1819-1822); wrote sections on geology, plants and fish for official account; published *Narrative of a Journey to the Shores of the Polar Sea* (1823); returned as botanist on second Franklin expedition to Canada (1825-1827); traveled overland to Arctic Ocean; specimens described in two books: [a] *Flora Boreali-Americana* (1833-1840) by Sir William Jackson Hooker, and [b] *Fauna Boreali-Americana* (1829-1837) by Richardson, William John Swainson, John Edward Gray and William Kirby; published *Icones Piscium* (1843); NOTE: Franklin again left England in May 1845 on ships *Erebus* and *Terror*, without Richardson, reached Lancaster Sound, entrance to Barrow's strait in August, and was never seen again; over a dozen expeditions sought clues; Richardson knighted (1846); traveled as botanist with John Rae [surveyor for Hudson Bay Company] on another unsuccessful search for Franklin (1848-1849); published experiences as: *An Arctic Searching Expedition* (1851); retired to Lake District in Scotland (1855); published *Catalogue of Apodal Fish in the British Museum* (1856); edited second edition of *Yarrell's History of British Fishes* (1860); published *The Polar Regions* (1861); died June 5th 1865; buried at Grasmere; eponyms: *Carex richardsonii* (R.Brown ex Richardson, 1823) Richardson Sedge; *Descurainia richardsonii* (O.E.Schulz, 1924) Richardson Tansy Mustard; *Geranium richardsonii* (Fischer+ Trautvetter,1837) Richardson Cranesbill; *Heuchera richardsonii* (R.Brown,1823)

Richardson Alum Root; *Hymenoxys richardsonii* [W.J.Hooker,1833] (Cockerell,1904) {=*Picradenia richardsonii* (W.J.Hooker,1833)} Richardson Bitterweed, Pingue; *Muhlenbergia richardsonis* [Trinius,1840] (Rydberg,1905) {=*Vilfa richardsonis* (Trinius, 1840)} Richardson Muhly Grass; *Potamogeton richardsonii* [A.Bennett,1889] (Rydberg,1905) {=*Potamogeton perfoliatus* var. *richardsonii* (A.Bennett,1889)} Richardson Pondweed; *Stipa richardsonii* (Link, 1833) Richardson Needle Grass

ROBIN, Jean (1550-1629); herbalist to Kings Henri III, Henri IV and Louis XIII of France; director of royal apothecary garden; father of Vespasian ROBIN (1579-1662); father and son introduced honey locust tree (*Robinia pseudoacacia*) to Europe; one of the oldest trees in Paris located in Square Rene Viviani supposedly propagated and planted by the Robins in 1602; seeds probably came from Louisiana; exchanged other plants with English herbalist John Gerard; received plants and specimens from Canada sent by French explorer Samuel Champlain; eponyms: *Robinia* (Linnaeus, 1753) Honey Locust; *R.neomexicana* (A.Gray,1854) New Mexican Honey Locust

ROBINSON, John Thomas Romney (1792-1882); Irish astronomer and physicist; born April 23rd 1792; died February 28th 1882; friend of Dr. Thomas COULTER (1793-1843) an Irish physician who traveled in California in 1833, discovered the Matilija Poppy and sent a description and specimen to Irish botanist William Henry Harvey (1811-1866); eponyms: *Romneya* (T.Coulter ex Harvey, 1845); *R.coulteri* (Harvey,1845) Matilija Poppy

ROMNEY see ROBINSON, John Thomas Romney

ROSE, Joseph Nelson (1862-1928); American botanist; born January 11th 1862 in Union County, Indiana; father died serving during Civil War; graduated from high school in Liberty, Indiana; received B.A. and M.A. from Wabash College; married Lou Beatrice Sims (1888); received Ph.D. from Wabash College (1889); had three sons and three daughters; worked at United States Department of Agriculture (1889-1896); became associate curator of United States National Herbarium at Smithsonian Institute (1896); studied *Apiaceae* [≡*Umbelliferae*] (parsley family), *Cactaceae* (cactus family) and *Crassulaceae* (stonecrop family); made several field trips to Mexico; presented specimens to Smithsonian and New York Botanical Garden; took leave of absence from Smithsonian for fieldwork in South America mostly collecting cacti; published with Nathaniel Lord Britton (1859-1934) four-volume *The Cactaceae* (1919-1923) illustrated by Mary Emily Eaton (1873-1961); with Britton as co-author published *North American Flora* (1928); other co-authors: William Marriott CANBY, John Merle COULTER, Frederick Vernon COVILLE, Ivan Murray JOHNSTON, Joseph Hannum PAINTER, Paul Carpenter STANDLEY, George S. VASEY (1822-1893); died May 4th 1928; eponyms: *Agave roseana* (Trelease,1911) Rose Agave; *Desmodium rosei* (B.G.Schubert,1940) Rose Tick Clover

ROTHROCK, Joseph Trimble (1839-1922); American physician, botanist and explorer from Pennsylvania; studied botany under Asa GRAY (1810-1888) at Harvard University; explored in British Columbia (1865); professor of botany at Pennsylvania Agricultural College [now Penn

State] (1867-1869); botanist and surgeon with George Montague WHEELER on surveys to the western United States (1871-1879); published descriptions of those collections; studied botany at University of Strasbourg in Germany and visited European managed forests (1880); first state commissioner of forestry in Pennsylvania (1895-1904); eponyms: *Plectocephalus rothrockii* [Greenman,1904] (D.J.N.Hind,1996) {=*Centaurea rothrockii* (Greenman,1904)} Star Thistle, Basket Flower

RUDBECK, Olaf ‘The Elder’ (1630-1702) and Olaf RUDBECK ‘The Younger’ (1660-1740); name also spelled: Olof or Olaus Rudbeckius in Latin; predecessors of Carolus LINNAEUS at Uppsala University; Linnaeus named genus *Rudbeckia* (coneflowers) to honor both father and son; **ELDER** Rudbeck was Swedish scientist, author, professor of medicine and *rector magnificus* at Uppsala; son of Bishop Johannes Rudbeckius personal chaplain to King Gustavus Adolphus; studied human anatomy, linguistics, music and botany; established first botanical garden in Sweden at Uppsala; originally named Rudbeck Garden but renamed for Linnaeus one-hundred years later; discovered lymphatic system; presented result to Queen Christina of Sweden (spring-1652); published findings (fall-1653) after Danish scientist Thomas Bartholin described similar results independently; Queen supported further research; cupola built on roof of Gustavianum (main university building); dissections done there before students; both landmarks still intact; published *Atlantica* (1689) or *Atland eller Manheim* in Swedish – historical linguistics used to claim [a] Sweden was Atlantis, [b] Swedish language originally used by Adam, and [c] Latin and Hebrew evolved from Swedish; book severely criticized by Danish author Ludvig Holberg and Swedish physician Andreas Kempe; both wrote satires showing danger of linking etymology with mythic history; fire destroyed much of Uppsala and writings lost (1702); died shortly after fire; buried in transept of Uppsala Cathedral; Swedish monarchs often crowned over crypt; **YOUNGER** Rudbeck added more language conjectures; supported Swedish national aspirations as European power; studied botany and astronomy; became respected singer and botany professor at Uppsala; an impoverished student named Carolus LINNAEUS presented new classification system based on counting male and female reproductive flower parts which sorted all plants into 23 classes; Rudbeck hired him as adjunct or assistant which ended his financial difficulties; Alfred Nobel descended from Rudbeck via daughter Wendela who married Peter Olai Nobelius; eponyms: *Rudbeckia* (Linnaeus,1753) Coneflowers; *R.laciniata* (Linnaeus,1753) Cut-Leaved Coneflower

RUSBY, Henry Hurd (1855-1940); American botanist; raised in Franklin [now Nutley] New Jersey; personal herbarium won first prize at Centennial Exposition in Philadelphia (1876) and met George THURBER president of Torrey Botanical Club; joined Torrey Botanical Club and entered Medical College of New York University (1879); while still a student, collected plants in Texas and New Mexico for Smithsonian Institute (1880-1881); collected medicinal flora of Arizona for Parke-Davis Company (1883); graduated from medical school (1884); met Nathaniel Lord Britton at Torrey Botanical Club and formed club goal to establish botanic garden in New York City; explored and collected for Parke-Davis in remote regions of Colombia, Ecuador, Peru, Chile, Bolivia and Brazil (1885-1886); eight member botanic garden committee [including Britton and Rusby] formed (1888); renounced medicine and became professor of botany and materia medica at College of Pharmacy at Columbia University (1889); helped secure Columbia

College herbarium and botanical library for New York Botanical Garden; appointed honorary curator of Economic Botany Museum at New York Botanical Garden (1898); served on museum board of managers (1898-1933); dean of faculty at College of Pharmacy (1904-1930); went on final field trip to Amazon Basin as director of Mulford Biological Expedition (1921); retired from College of Pharmacy (1930); dean emeritus (1930-1940); died November 18th 1940; eponyms: *Brickellia rusbyi* (A. Gray, 1884) Rusby Brickell Bush; *Hymenoxys rusbyi* [A. Gray, 1883] (Cockerell, 1904) {=*Actinella rusbyi* (A. Gray, 1883)} Rusby Rubber Weed

RYDBERG, Per Axel (1860-1931); Swedish born American botanist; born July 6th 1860 in Odh, Västergötland, Sweden; emigrated to United States (1882); first worked at Michigan iron mines; hoped to become mining engineer; suffered serious accident which caused lifelong limp; forced to intellectual pursuits; taught mathematics at Luther Academy in Wahoo, Nebraska (1884-1890); received B.S. from University of Nebraska (1891); strongly influenced by botany professor Charles Edwin BESSEY (1845-1915); worked for United States Department of Agriculture exploring in western Nebraska (summer 1891); in Black Hills in South Dakota (1892); in Sand Hills in western Nebraska (1893); continued teaching at Luther Academy; received M.A. from University of Nebraska (1895); university published monograph on *Rosales* – part of intended series on flora of Nebraska; collected again for USDA in Montana with Cornelius Lott Shear (summer 1895); moved to New York (autumn 1895); pursued Ph.D. at Columbia University under guidance of Nathaniel Lord Britton; taught natural science and mathematics at Upsala Institute [later Upsala College] in Brooklyn and Kenilworth, New Jersey; elected to Torrey Botanical Club (1896); member of first field trip of New York Botanical Garden to Montana and Yellowstone Park with Ernst Athern Bessey, son of mentor C.E. Bessey (summer 1897); received Ph.D. from Columbia University (1898); processed Montana and Yellowstone collections (summer 1898); one of nine original members to join New York Botanical Garden permanent staff (1899); published *North American Flora* (1905-1932), assistant curator of New York Botanical Garden herbarium (1899-1908); conducted field work in southeastern Colorado with King Vreeland (1900); joined American Association for the Advancement of Science (1900); elected fellow (1901); visited Kew Gardens in England and visited Sweden briefly (1901); chosen as Associate of the Botanical Society of America (1901); collected in Utah, visited University of Wyoming, visited Los Angeles and San Francisco (1905); published *Flora of Colorado* (1906), joined American Geographical Society and Ecological Society of America (1907); became full curator of herbarium (1908-1931); explored in southeast Utah with Albert Osburn Garrett (1911); published *Flora of Rocky Mountains and Adjacent Plains* (1917); explored in Allegheny Mountains with John Tuttle Perry (1925); explored in Minnesota, Iowa, Nebraska, Kansas and Dakotas (1926); final expedition to Kansas and Minnesota cut short by illness (1929); died July 25th 1931; publish over 7000 pages of research; family destroyed many papers except some letters and notes; published posthumously: *Flora of the Prairies and Plains of Central North America* (1932); eponyms: *Toxicodendron rydbergii* (E.L. Greene, 1905) {=*Rhus radicans* (Linnaeus, 1753) var. *rydbergii* [Small ex Rydberg, 1900] (Rehder, 1939); =*Rhus rydbergii* (Small ex Rydberg, 1900)} Poison Ivy

SAINT-HILAIRE, Auguste [Augustin] François César Prouvañçal de (1779-1853); usually

known as Auguste de Saint-Hilaire; self-taught French botanist, entomologist and traveler; born October 4th 1799 in Orleans; wrote on botanical subjects as youth; traveled to South America (1816); explored and collected in southern and central Brazil, Uruguay and Paraguay (1816-1822); returned to France and assisted renowned French botanist Antoine Laurent de JUSSIEU (1748-1836); published with Jussieu and Jacques Cambessedes (1799-1863) *Histoire des Plantes les plus Remarquables du Brasil et de Paraguay* (1824), published *Flora Brasiliae Meridionalis* (1825-1832); published *Plantes Usuelles des Bresiliens* (1827-1828); briefly returned to South America (1830); published with Jussieu and Cambessedes *Voyage dans le District des Diamants et sur le Littoral du Bresil* (1833); published *Lecons de Botanique, Comprenant Principalement la Morphologic Vegetale* (1840) a comprehensive study of botanical morphology applied to systematic botany; died September 30th 1853 in Orleans; eponyms: *Hilaria* (Humboldt+Bonpland+Kunth,1816) Galleta Grass; *H.jamesii* [Torrey,1824] (Bentham, 1881) *Pleuraphis jamesii* (Torrey,1824)} James Galleta Grass

SANVITALI Italian noble family; name also spelled Sanvitale; Lamarck's dedication of genus *Sanvitalia* could refer to family as whole or to an individual; [a] Federico Sanvitali (1704-1761) – professor at Brescia in Italy and author of *Elementi di Architettura Civile*, [b] Federico Sanvitali (1770-1819) – student of Lamarck and grand-nephew of above professor, or [c] Count Stefano Sanvitali (1764-1838) – botany student under M. Gualteri and older brother of second Federico above; Gualteri sent original plant specimens to Lamarck; eponyms: *Sanvitalia* (Lamarck,1792) *Sanvitalia*; *S.abertii* (A.Gray,1849) Abert *Sanvitalia*; see also: ABERT

SCHIEDE, Christian Julius Wilhelm (1798-1836); German physician and botanist; born in Kassel; studied natural sciences and medicine in Berlin and Göttingen; earned doctorate (1825); practiced medicine in Kassel (1825-1828); emigrated to Mexico (1828); accompanied by naturalist Ferdinand DEPPE (1794-1861) who had previously collected in that country; planned to collect zoological and botanical specimens and sell them to museums and dealers in Europe; settled in eastern Mexico in Jalapa [Xalapa] (July 1828); collected in eastern Mexico, especially throughout state of Veracruz; made one short trip to southern Texas; introduced several Mexican plants to Europe; sold collections to museums in Berlin and Vienna; money insufficient to continue collecting; Deppe and Schiede abandoned their efforts (late 1830); Deppe collected briefly in California and Hawaii (1830) while returning to Germany; Schiede remained in Mexico (1830-1836); died at age 38; eponyms: *Aristida schiedeana* (Trinius+ Ruprecht,1842) var. *orcuttiana* [Vasey,1886] (Allred+Valdés-Reyna, 1995) {=*Aristida orcuttiana* (Vasey,1886)} Schiede Three-Awn Grass; *Calyptanthes schiediana* (O.Berg,1854) Schiede *Calyptanthes*; *Cecropia schiedeana* (Klotzsch,1847) Schiede Trumpet Tree; *Croton schideanus* (Schlechtendal,1846) Schiede *Croton*; *Lepechinia schiedeana* [Schlechtendal,1832] (Vatke,1875) {=*Stachys schiedeana* (Schlechtendal,1832)} Schiede Pitcher Sage; *Lysiloma schideanum* (Bentham,1844) Schiede Feather Bush; *Magnolia schiedeana* (Schlechtendal,1864) Schiede *Magnolia*; *Mammillaria schiedeana* (Ehrenberg ex Schlechtendal,1838) Schiede Nipple Cactus

SCOULER, John (1804-1871); Scottish surgeon, physician, plant collector, naturalist and botanist; classmate of David DOUGLAS at University of Glasgow; traveled as medical officer

with Douglas as botanist on Hudson Bay Company brig *William and Ann*; sailed to Madeira, Brazil, Juan Fernandez Island and Galápagos Islands: first botanists to collect specimens in Galápagos Islands ten years before Darwin arrived in 1835; reached James Island (January 9th 1825); collected about forty samples but some later destroyed; reached Pacific coast of North America; explored and collected in Columbia River basin; visited Queen Charlotte Islands in British Columbia (1825); visited Nootka Sound on Vancouver Island on return journey; Douglas remained in America until 1827 but Scouler returned to England with ship (1825); gave specimens to Sir William Jackson Hooker his former professor at Glasgow; introduced Pacific plants to English gardens; published *Account of a Voyage to Madeira, Brazil, Juan Fernandez, and the Gallipagos Islands: Performed in 1824 and 1825, with a View of Examining their Natural History* (1826); published *Observations on Indigenous Tribes of the Northwest Coast of America and Notes on the Geography of the Columbia River* (1841); Sir Joseph Dalton Hooker cited thirteen Galápagos plants gathered by Scouler and five by Douglas in paper on Darwin (1847); journal released posthumously as *Journal of a Voyage to Northwest America* (1905) in Quarterly of the Oregon Historical Society; many specimens of Scouler and Douglas now located at John D. Prescott herbarium at Oxford University; eponyms: *Scouleria* (W.J.Hooker, 1829) *Scouleria*; *Hypericum scouleri* (W.J.Hooker, 1831) *Scouler Saint Johnswort*; *Penstemon fruticosus* [Pursh, 1814] (E.L.Greene, 1892) var. *scouleri* (Cronquist, 1959) {=*Gerardia fruticosa* (Pursh, 1814)} *Scouler Beard Tongue*; *Polypodium scouleri* (W.J.Hooker+Greville, 1829) *Scouler Polypod Fern*; *Salix scouleriana* (Barratt ex W.J. Hooker, 1838) *Scouler Willow*; *Silene scouleri* (W.J.Hooker, 1830) *Scouler Catchfly*

SOULE (?-?) no information presently available; eponyms: *Malaxis soulei* (L.O.Williams, 1934) *Soule Adder's Mouth Orchid*, *Mountain Malaxis*, *Chiricahua Adder's Mouth*

STANSBURY, Howard (1806-1863); American engineer and army officer; born February 8th 1806 in New York City; studied civil engineering; married Helen Moody of Detroit (September 1st 1827); had one daughter and one son; worked as civil engineer for United States Topographical Bureau (1828-1838); led survey of proposed canals to unite Lake Erie, Lake Michigan and Wabash River (1828); surveyed James River to improve harbor at Richmond, Virginia (1836); surveyed Illinois and Kaskaskia Rivers (1837); surveyed railroad from Milwaukee to Dubuque (1837); built road from Milwaukee to Mississippi River (1838); entered newly formed United States Army corps of topographical engineers as first lieutenant (July 7th 1838); promoted to Captain (1840); surveyed Great Lakes (1841); surveyed harbor at Portsmouth, New Hampshire (1842-1845); built iron light-house at Carysfort Reef, Florida (1847); during Mexican War, built fortifications in Dry Tortugas in Gulf of Mexico (1848); led exploring expedition to Great Salt Lake valley in Utah (1849-1851); second in command lieutenant J.W.Gunnison; surveyed and evaluated Oregon Trail; examined Mormon community in Salt Lake City; evaluated food supplies for overland travelers; studied fauna and flora of Great Basin; report published as *An Expedition to the Valley of the Great Salt Lake of Utah* gained wide audience; managed Great Lake harbor construction projects (1852-1853); worked on military roads in Minnesota (1856); during Civil War, served briefly as mustering officer at Columbus, Ohio; then recruiting officer for state of Wisconsin at Madison; appointed major of Madison

(September 28th 1861); died April 17th 1863 in Madison of heart failure related possibly to hardships endured on Great Salt Lake expedition; buried in St. Paul, Minnesota; eponyms: *Purshia stansburyana* [Torrey, 1852] (Henrickson, 1986) {=*Cowania stansburyana* (Torrey, 1852)} Pursh Antelope Brush

STANDLEY, Paul Carpenter (1884-1963); American botanist; studied flora of Alaska, New Mexico, Mexico, Central America and northern Andes; born March 21st 1884 in Avalon, Missouri; studied at Drury College in Springfield, Missouri; transferred to New Mexico State College in Las Cruces; received bachelor's degree (1907) and masters degrees (1908); became assistant botanist at Agricultural Experiment Station in Las Cruces (1908-1909); became botanist and assistant curator at United States National Museum and Herbarium in Washington D.C. (June 1st 1909); published with Elmer Otis Wootton *Flora of New Mexico* (1915); elected member of Biologists Field Club of Washington (1915); published several family monographs for *Flora of North America* (1916-1924); published *Flora of the District of Columbia* (1919); became associate curator of National Museum (May 15th 1923); collaborated with Frederick Vernon Coville to complete unfinished Harriman Series volumes on *Flora of Alaska*; published with A.S.Hitchcock *Trees and Shrubs of Mexico* (1926); published *Flora of the Panama Canal Zone* (1928); resigned from National Museum and became curator of Chicago Field Museum of Natural History (May-1928); published *Flora of Guatemala* (); published *Flora of Costa Rica* (1937-1940); retired from Chicago Field Museum of Natural History and moved to Escuela Agricola Panamericana Zamorano – private agricultural university located in Yeguaré River valley in Honduras (1950); worked at library and herbarium and did field work (1950-1956); stopped doing botanical work and moved to Tegucigalpa, capital of Honduras (1957); died there June 2nd 1963; eponyms: *Standleya* (Brade, 1932); *Standleyacanthus* (Leonard, 1952); *Standleyanthus* (King+B.L.Robinson, 1971); *Acacia standleyi* (Safford, 1914) Standley Acacia; *Besleria standleyi* (C.V.Morton, 1938) Standley Besleria; *Chenopodium hybridum* (Linnaeus, 1753) var. *standleyanum* [Aellen, 1929] (Fernald, 1949) {=*Chenopodium gigantospermum* var. *standleyanum* (Aellen, 1929)} Standley GooseFoot; *Mansoa standleyi* [Steyermark, 1947] (A.Gentry, 1979) {=*Pseudocalymma standleyi* (Steyermark, 1947)} Standley Mansoa; *Notholaena standleyi* (Maxon, 1915) {=*Cheilanthes hookeri* (Domin, 1913)} Standley Star Cloak Fern, Hooker Lip Fern; *Palicourea standleyana* (C.M.Taylor, 1989) Standley Coto

TABERNAEMONTANUS, Jacobus Theodorus von (c.1522-1590); German herbalist and physician; also used names: Jakob Theodor von BERGZABERN and Jakob Theodor von MUELLER; birth dates of 1520 and 1525 also cited; born in Bergzabern, a small town in Palatinate region of Germany; name of town means: mountain inn or mountain tavern in German, which transposed to tabernaemontanus in Latin; early life uncertain; referred to as father of German botany; mentioned as student of Hieronymus BOCH (1545); became private doctor to Count Philipp III of Nassau-Saarbrücken-Weilbrüg (1549); registered at age 40 at University of Heidelberg (1562); worked as private doctor to Marquard von Hattstein, bishop of Speyer (1564); worked as town physician for city of Worms; became professor of botany at the university and personal physician to Count of the Palatine (prince elector) in Heidelberg; supposedly married three times and fathered 18 children; published life work: *Neuwe*

Kreuterbuch [New Herbal Book] in 1588, containing over 2,300 woodcuts, written in traditional style of Brunfels, Mattioli, Fuchs and Boch, but with better illustrations and descriptions; medicinal data emphasized more than botanical information; reprinted numerous times; died in August 1590 in Heidelberg; eponyms: *Tabernaemontana* (Linnaeus,1753) Milk Tree; *Amsonia tabernaemontana* (Walter,1788) Blue Star; *Potentilla tabernaemontani* (Ascherson,1891) Cinquefoil; *Schoenoplectus tabernaemontani* [C.C.Gmelin,1805] (Palla,1888) {=*Scirpus tabernaemontani* (C.C.Gmelin,1805)} Bulrush

TAGES – In Roman mythology, an minor Etruscan god, grandson of Jupiter, said to have risen from freshly ploughed ground; eponyms: *Tagetes* (Linnaeus,1753) French Marigold; *T.micrantha* (Cavanilles, 1797) Small-Flowered Marigold

THURBER, George (1821-1890); American botanist, chemist and horticulturist from New York; self-educated; worked as pharmacist; earned master's degree in chemistry at Brown University; worked with George S. VASEY (1822-1893) on grasses for *Flora of North America* (1838-1842) by Asa GRAY (1810-1888) and John TORREY (1796-1873); collected in southwestern United States as quartermaster and botanist on boundary survey between United States and Mexico (1850-1854); professor of horticulture and botany at Michigan Agricultural College (1859-1863); editor of *American Agriculturalist* (1863-1890); met and encouraged young American botanist Henry Hurd RUSBY (1855-1940) at Centennial Exposition in Philadelphia (1876); studied California grasses; left uncompleted manuscript on American Grasses; died 1890; eponyms: *Achnatherum thurberianum* [Piper,1900] (Barkworth,1993) {=*Stipa thurberiana* (Piper,1900)} Thurber Needle Grass; *Acourtia thurberi* [A.Gray,1854] (Reveal+ R.M.King,1973) {=*Perezia thurberi* (A.Gray,1854)} Thurber Desert Peony; *Agrostis thurberiana* (Hitchcock,1905) Thurber Bent Grass; *Anisacanthus thurberi* [Torrey,1859] (A.Gray,1878) {=*Drejera thurberi* (Torrey, 1859)} Chuparosa, Thurber Desert Honeysuckle; *Chorizanthe thurberi* [A.Gray ex Bentham, 1856] (S.Watson,1877) {=*Centrostegia thurberi* (A.Gray ex Bentham,1856)} Thurber Chorizanthe, *Dyssodia thurberi* [A.Gray, 1883] (A.Nelson,1909) {=*Hymenatherum thurberi* (A.Gray, 1883)} Thurber Fetid Marigold; *Eriogonum thurberi*, *Festuca thurberi* (Vasey,1894) Thurber Fescue Grass; *Gossypium thurberi* (Todaro,1877) Thurber Wild Cotton; *Lepidium thurberi* (E.O. Wootton,1898) Thurber Pepper Grass; *Muhlenbergia thurberi* [Scribner,1898] (Rydberg,1905) {=*Sporobolus thurberi* (Scribner, 1898)} Thurber Muhly Grass; *Onosmodium thurberi* (A.Gray,1878) Thurber False Gromwell; *Penstemon thurberi* (Torrey,1857) Thurber Beard Tongue; *Petalonyx thurberi* (A.Gray,1855) Thurber Sandpaper Plant; *Pilostyles thurberi* (A.Gray,1855) Thurber Pilostyles; *Potentilla thurberi* (A.Gray,1854) Thurber Cinquefoil; *Stenocereus thurberi* [Engelmann,1854] (Buxbaum,1961) {=*Cereus thurberi* (Engelmann,1854) =*Lemaireocereus thurberi* (Britton+Rose,1909)} Thurber Organ Pipe Cactus

TORREY, John (1796-1873); noted American botanist, physician and systematist; born August 15th 1796 in New York City; observed and collected plants in New York area; father appointed fiscal agent for New York State Prison at Greenwich near Troy (c.1812); at age 15 met American botanist Amos EATON (1776-1842) wrongly incarcerated (1811-1815) on forgery charges and debt in a land dispute; Eaton studied and taught sciences until released; Torrey learned basic

botany, mineralogy and chemistry; entered College of Physicians and Surgeons in New York and studied medicine (1815-1818); appointed by Lyceum of Natural History to prepare *Catalogue of Plants growing spontaneously within Thirty Miles of the City of New York* (1817); received medical degree and opened a practice in New York (1818); published above catalogue (1819); published volume one of uncompleted *Flora of the Northern and Middle States* (1824); became professor of chemistry, mineralogy and geology at West Point and also acted as assistant surgeon (1824); became professor of chemistry and botany at College of Physicians and Surgeons in New York (1827); received specimens of Major Stephen Long expedition collected by Edwin JAMES (1820); sent descriptions to Lyceum of Natural History (1823); studied genus *Carex* [sedges]; asked by von Schweinitz to edit monograph of North American sedges; became dissatisfied with Linnaean sexual system; began using natural system proposed by English botanist John LINDLEY (1799-1865) with plants arranged by families; published *A Compendium to Flora of the Northern and Middle States* with new system (1830); published American reprint of first edition of Lindley's *Introduction to the Natural System of Botany* with appended catalogue of North American genera so arranged (1831); appointed state botanist of New York (1836); published initial volumes of *Flora of North America* (1838-1842) assisted by Asa GRAY (1810-1888); published *Flora of New York* (1843); accepted additional botany teaching position at Princeton College; described plants collected on western explorations, primarily second expedition of John Charles FREMONT (1813-1890) to Rocky Mountains (1842) and third expedition to Oregon and northern California (1843); published: *Report of Exploring Expedition to the Rocky Mountains, Oregon and California* (1843) with FREMONT; also described plants collected by various Pacific railroad surveys, Mexican boundary survey, Joseph Nicollet and Charles Wilkes; published *Botany of the Emory Expedition* (1848) with William Emory; published *Stansbury Utah Expedition* (1852) with Howard Stansbury; published *Report of an Expedition Down to the Zuni and Colorado Rivers* (1853) with L. Sitgreaves; published *Exploration of the Red River of Louisiana* (1853) with Randolph Marcy; selected by Secretary of Treasury as superintendent of United States assay office in New York (1853); declined but accepted less prominent post of chief assayer (1853-1873); continued to teach botany (1853-1873); published *Botany of the Pope Expedition* (1855) with J.Pope; published *Botany of the Whipple Expedition* (1857); published *Botany of the Mexican Boundary Survey* (1858); published *Botany of the Williamson and Abbot Expedition* (1858); presented personal herbarium and botanical library to Columbia College (1860); published *Botany of the Stevens Expedition* (1860); collected in California (1865); became [briefly] first president of Torrey Botanical Club (1873); member of National Academy at Washington; president of American Association for Advancement of Science; twice president of New York Lyceum of Natural History; his greenhouse and specimen collections sat at site of modern Rockefeller Center; died March 10th 1873; eponyms: *Torreya* (Arnott,1838) California Nutmeg; *Amaranthus torreyi* [A.Gray,1860] (A.Gray ex S.Watson,1880) {=*Amblogyna torreyi* (A.Gray,1860)} Torrey Pigweed, Torrey Amaranth; *Anthericum torreyi* (Baker,1876) Torrey Anthericum; *Carex torreyi* (Tuckerman, 1843) Torrey Sedge; *Juncus torreyi* (Coville,1895) Torrey Rush; *Lycium torreyi* (A.Gray,1862) Torrey WolfBerry; *Melica torreyana* (Scribner,1885) Torrey Melic Grass; *Muhlenbergia torreyana* [Schultes,1824](Hitchcock,1934) {=*Agrostis torreyana* (Schultes,1824)} Torrey Muhly Grass; *Muhlenbergia torreyi* [Kunth,1833] (Hitchcock ex Bush,1919) {=*Agrostis torreyi*

(Kunth,1833)} Torrey Muhly Grass; *Phyllospadix torreyi* (S.Watson, 1879) Torrey Surf Grass; *Pinus torreyana* (Parry ex Carrière,1855) Torrey Pine; *Pycnanthemum torreyi* (Bentham,1834) Torrey Mountain Mint; *Rhynchospora torreyana* (A.Gray,1835) Torrey Beaked Rush; *Scirpus torreyi* (Olney,1847) Torrey Bulrush; *Solanum torreyi* (A.Gray,1862) Torrey Nightshade; *Suaeda torreyana* (S.Watson,1874) Torrey Sea Blite

TOURNEFORT, Joseph Pitton de (1656-1708); French physician and botanist; born in Aix in southern France to noble family; learned flora of Aix by self-instruction; father wanted him to dedicate life to church service; studied Latin, theology, botany, chemistry and anatomy at Jesuit college in Aix; when father died, chose botany rather than religion (1677); collected plants in French Alps and started personal herbarium (1678); entered Montpellier University in southern France and studied medicine and botany; learned flora of Montpellier by self-instruction; worked and studied in university botanic garden founded by king Henry IV of France and directed by Pierre Magnol for whom Charles Plumier named genus *Magnolia*; left Montpellier (spring 1681), traveled to Barcelona, collected in Catalonia and Pyrenees mountains and lectured to medical students on botany walks; robbed several times by bandits; returned to Aix and rearranged herbarium (1682); collected further in Provence, Languedoc, Savoy and French Alps; recommended by royal physician and professor of botany Guy Crescent Fagon 1638-1718) for work at *Jardin du Roi* in Paris to instruct medical students in botany (1683); accepted position but soon also traveled to Spain and Portugal (1684); studied palms in Andalusia in southern Spain; traveled to Holland and considered employment at Leyden botanic garden as successor to director Paul Hermann (1685); declined position, traveled to England, met with botanists, and returned to Paris (1686); at age 35, recommended by Abbé Bignon (for whom Linnaeus later named the genus *Bignonia*) by reputation alone to become member of Royal Academy of Science (1691); developed new and very successful classification system; published: *Éléments de Botanique* in French with descriptions of 673 *genera* (1694); published in Latin an essentially identical second edition with different title: *Institutiones Rei Herbariae* (1700); under royal patronage, traveled to Greece, Middle East and Persia [Iran] (1700-1702) with German physician Andreas von Gundelsheimer (1668-1715) and French artist Claude Aubriet (c.1665-1742); collected 1,356 new species; placed these in existing genera and created 25 new genera; published essentially a third edition with new title and above material added: *Corollarium* (1703); denied sexuality in plants; did not understand function of pistils, styles, anthers stamens; classification system based on characteristics of flower corollas and seeds; did not discern difference between monocots and dicots; defined some groups equivalently to modern plant families; defined many groups equivalently to modern plant genera; considered the father of genera; used some binomial nomenclature, but not consistently; proposed many generic names later adopted by Linnaeus in 1753; suffered a street accident, which induced a short but fatal illness; died in December 1708; [condensed from E. L. Greene's – *Landmarks of Botanical History* – pages 938-964]; eponyms: *Tournefortia* (Linnaeus,1753) Tree Heliotrope

TOWNSEND, David (1787-1858); American bank officer, civic leader and competent amateur botanist; born and raised in West Chester, Pennsylvania, near Philadelphia; head bank cashier, county commissioner, devoted plant collector of Chester County plants; founding member of

Chester County Cabinet of Natural Science (1826) [now West Chester University]; life-long friend, business associate and botanical student of American botanist Dr. William Darlington (1782-1863); corresponded with John Torrey and Sir William Jackson Hooker; exchanged over 700 American plant specimens with Hooker for British natural history books; Hooker identified unknowns and used specimens in *Flora Boreali-Americana* (1833); eponyms: *Townsendia* (W.J.Hooker,1833) Townsend Daisy; *T.annua* (Beaman,1957) Annual Townsend Daisy; *T.exscapa* [Richardson,1823] (Porter,1894) {=*Aster exscapus* (Richardson,1823)} Scapeless Townsend Daisy

TRADESCANT, John *The Elder* (c.1570-1638) and John *The Younger* (1608-1662); father and son; English gardeners, importers of exotic plants, accumulators of rare artifacts; **ELDER** Tradescant probably born at Walberswick in Suffolk, but Netherlands birth possible; had no sense of smell; wife named Elizabeth; marriage at Meopham, Kent (June 18th 1607); began work as head gardener to Robert Cecil 1st Earl of Salisbury (1563-1612) at Hatfield House in Hertfordshire (1609); twice sent to France, Belgium and Netherlands to obtain fruit trees for estate (1610 and 1611); retained by Robert's son William Cecil 2nd Earl of Salisbury for garden at Salisbury House on the Strand in London (1612-1615); worked for Edward Lord Wotton to create garden at St. Augustine Abbey in Canterbury (1615-1623); Captain Samuel Argall [later Governor of Virginia] brought plants from America (1617); sent by Wotton to Archangel in northern Russia to Nikolo-Korelsky Monastery (1618); traveled with Sir Dudley Digges who sought advise for garden at Chilham Castle; obtained botanical samples including larch trees; journal of expedition extant at Oxford; traveled to Algiers on British ship *H.M.S. Mercury* on expedition against Barbary pirates (1620); probably brought back first apricot tree to England; became gardener to royal favorite George Villiers 1st Duke of Buckingham at New Hall in Essex near Chelmsford (1623) and later at Burley-on-the-Hill {NOTE in 1614 at age 22 Villiers, a commoner, became lover of King James I who made him a Duke in 1623} sent to Netherlands by Villiers (1624); King James died (March-1625); went to Paris as baggage-master with Villiers to escort Henrietta Maria to England for marriage with Prince Charles (May-1625); Charles crowned king (February-1626); again traveled to France with Villiers and brought back poppies (1627); served as engineer on ill-fated English campaign led by Villiers against Isle of Rhé (July-1627) an island off the west coast of France during the siege of La Rochelle on mainland; Villiers stabbed to death at Portsmouth (1628); retained by King Charles as royal gardens keeper at queen's residence *Oatlands Palace* in Surrey near Weybridge (1630); son acquired ornamental scarlet runner beans from Virginia and father grew them at *Oatlands* (1637); collected huge set of curiosities and rare objects; kept them in large museum-like house known as *The Ark* located at Lambeth in London on Thames south bank; died April 15th or 16th 1638; **YOUNGER** Tradescant born at Meopham in Kent (August 4th 1608); sent to Kings School in Canterbury at age 11 while father worked for Edward Lord Wotton at St Augustine Abbey (1619); married Jane Hurte and had two children; she died in 1634; took first trip to Virginia (1637); acquired 100 acres of land; brought back yucca, Virginia Creeper and scarlet runner beans; father died (1638); became new head gardener for King Charles and Queen Henrietta Maria; improved Queen's garden in Greenwich (1638-1642); work interrupted by first English civil war (1642-1645); King and Queen fled to Isle of Wight (1642); took second trip to Virginia (1642); probably introduced

horse chestnut, nectarine, pineapple and red romaine lettuce; married second time to Hester Pooks (date uncertain); Charles I executed (January 30th 1649) and Oliver Cromwell assumed power; took third trip to Virginia (1654); probably introduced tulip tree, pitcher plant, magnolia, bald cypress, phlox and asters; continually added to curio collection; catalogued all items as suggested by lawyer Elias Ashmole (1617-1692); opened house to public as *Musaeum Tradescantianum* with small admission fee – first English museum; died April 22nd 1662 at South Lambeth; bequeathed museum and library to Ashmole; material later became *Ashmolean Museum* located at Oxford; second wife Hester Pooks drowned in estate pond at Lambeth (April-1678); father, son and two wives buried at St-Mary-at-Lambeth church, which later became *Museum of Garden History*; tombs located near tomb of William Bligh (1754-1817) Captain of *H.M.S. Bounty*; eponyms: *Tradescantia* (Linnaeus, 1753) Spider Wort; *T.occidentalis* [Britton, 1896] (Smyth, 1899) {=*Tradescantia virginiana* var. *occidentalis* (Britton, 1896)} Western Spider Wort; *T.pinetorum* (E.L.Greene, 1893) Pine Spider Wort; *Aster tradescanti* (Linnaeus, 1753) Tradescant Aster

TRAGUS see BOCK

UNDERWOOD Lucien Marcus (1853-1907); American botanist; born October 26th 1853 in New Woodstock, New York; received M.S. and Ph.D. at Syracuse University (1878-1879); published first manual of North American ferns – *Our Native Ferns and How to Study Them* (1881); taught geology, botany and natural science at Syracuse University (1887-1890); published *Moulds, Mildews and Mushrooms* (1899); studied mosses, liverworts and fungi; received Morgan Fellowship at Harvard University (1890); studied Sullivant and Taylor liverwort collections; taught at DePauw University (1890- 1895); inspired exhaustive study of entire North American flora; collaborated with Nathaniel Lord Britton; served on Nomenclature Committee of American Association for Advancement of Science (1892); drafted Rochester Code of botanic nomenclature; elected American delegate to International Botanic Congress in Genoa, Italy; decision made there to set 1753 as official nomenclature starting date; succeeded Britton as professor of botany at Columbia University (1896); joined staff of New York Botanical Garden (1896); participated in expeditions to Puerto Rico, Cuba, Jamaica and Rocky Mountains; founding member of NYBG board of scientific directors; served as chairman (1901-1907); contributed section on ferns to *Illustrated Flora of the Northern United States and Canada* by Britton and Brown; editor of *Bulletin of the Torrey Botanical Club*; helped found *Botanical Society of America*; inexplicably committed suicide (1907); eponym: *Selaginella underwoodii* (Hieronymus, 1901) Underwood Spike Moss

VALERIANUS, Publius Aurelius Licinius; born just before 200; died after 260; Roman emperor (253-260); known in English as Valerian; born to noble Roman family; early life unknown; married Egnatia Marininiana; had two sons – Publius Licinius Egnatius Gallienus [later made co-emperor] and Valerianus Minor; became member of Roman senate (238); chosen Senate censor but declined position (251); nominated governor of Rhine provinces Noricum and Raetia; gathered adherents and Raetian soldiers proclaimed him emperor; marched on Rome and Senate proclaimed him emperor (253); made son Gallienus co-emperor to help combat disorders in

Armenia and Persia; son ruled west; father went east to fight Shapur I of Persia; recovered Antioch and province of Syria (257); Goths sacked Asia Minor (258); Christians claimed persecutions ordered against them (c.258); moved to Edessa in Greece (259); plague killed critical number of legion soldiers; sought terms with Shapur I; defeated at Battle of Edessa and taken prisoner (c.260); died in captivity; Christian writer Lactantius claimed Persians flayed him alive, stuffed his body, dyed it red and exhibited it in a museum, but true fate uncertain; motive to show persecutors of Christians died badly made assertions unreliable; son Gallienus became sole emperor until assassinated in 268; genus *Valeriana* named in father's honor because he supposedly used plant as medicine; other sources said name derived from Latin: *valere* = to be strong or in good health, referring to medicinal properties; still other sources said name derived from: Valeria, an old Roman province in central Italy, or from: Via Valeria, a Roman road crossing that province from Rome to Adriatic Sea where plant common; eponyms: *Valeriana* (Linnaeus, 1753) Valerian; *Varizonica* (A. Gray, 1883) Arizona Valerian; *V. edulis* (Nuttall ex Torrey + A. Gray, 1841) Edible Valerian; *V. acutiloba* (Rydberg, 1901) Sharp-Lobed Valerian

VASEY, George S. (1822-1893); English born American botanist, physician and agrostologist; born February 28th 1822 in Snainton near Scarborough; fourth of ten children; at age one, family emigrated to United States (1823); settled in Oriskany, New York; left school at age 12 to work as store clerk; borrowed botany books and manually copied them; met naturalist Peter D. Knieskern who encouraged him to write to other botanists; sent many letters and collected in Oneida and McHenry Counties; graduated from Berkshire Medical Institute with M.D. degree and married Martha Jane Scott (1846); had four children; moved to Ringwood in Illinois, practiced medicine and collected plants (1847-1853); opened dry goods store (1854); founding member of Illinois Natural History Society (1858); began to write prolifically on botanical subjects but did not publish (1858-1861); received honorary M.A. from Illinois Wesleyan University (1864); wife's health deteriorated, family moved to Richview, but Martha Vasey died (1866); briefly stopped writing; remarried a widow; had many financial troubles; joined John Wesley Powell Colorado expedition as botanist (1868); returned and briefly edited *Entomologist*; became curator of Illinois State University Natural History Museum (1869-1871); became fellow of American Association for the Advancement of Science (1869); began to publish papers after 1870; resigned from museum; succeeded Charles Christopher PARRY as chief botanist at United States Department of Agriculture (1871); became curator and greatly expanded United States National Herbarium, especially grass collections (1872-1893); organized exhibit of American trees for Centennial Exposition in Philadelphia (1876); worked with Friedrich Wilhelm THUROW (1852-1930) and studied Texas grasses (after 1876); visited New Mexico (1884); published *Agricultural Grasses of the United States* (1884); visited New Mexico again (1886); named honorary curator of Smithsonian Institute herbarium (1889); began publishing *Contributions from the United States National Herbarium*; published *Grasses of the Southwest* (1890); became fellow of American Academy of Arts and Sciences (1892); representative at International Botanical Congress in Genoa and its vice-president (1892); published monograph of United States grasses; final section released posthumously; completed describing unpublished herbarium species a few days before dying on March 4th 1893 from peritonitis; eponyms: *Vaseyochloa* (A. Hitchcock, 1933) Vasey Grass; *Vaseyanthus* (Cogniaux, 1891) Vasey Flower;

Stipa vasey (Scribner, 1898) Vasey Feather Grass; *Aristida vaseyi* (Wooton+Standley,1912) Vasey Three-Awn Grass; his son George Richard Vasey (1853- ?) collected plants in California for U.S.D.A. (1876 and 1880), later settled in Washington state, and was honored by *Rhododendron vaseyi* (A.Gray,1880) Vasey Rhododendron

VIGUIER, Louis Guillaume Alexandre (1790-1867); French botanist and physician; collected plants in South Africa; no other information presently available; eponyms: *Viguiera* (Humboldt+Bonpland+Kunth,1818) Goldeneye; *V.cordifolia* (A.Gray,1852) Heart-Leaved Goldeneye; *V.dentata* [Cavanilles,1794] (Sprengel,1826) {=*Helianthus dentatus* (Cavanilles,1794)} Toothed Goldeneye

VREELAND, King (?-?); conducted field work in southeastern Colorado with Per Axel RYDBERG (1900); no other information presently available; eponyms: *Erigeron vreelandii* (Rydberg,1905) Vreeland Fleabane; *Quercus vreelandii* (Rydberg,1901) Vreeland Oak; *Corallorhiza striata* (Lindley,1840) var. *vreelandii* [Rydberg,1901] (L.O.Williams,1934) {=*Corallorhiza vreelandii* (Rydberg,1901)} Vreeland Coral Root; *Saxifraga ferruginea* (Graham,1829) var. *vreelandii* [Small,1905] (Engler+Irmscher,1916) {=*Spatularia vreelandii* (Small,1905)} Vreeland Saxifrage

WATSON, Sereno (1826-1892); American botanist; professor at Harvard University; assistant to Asa GRAY (1810-1888); published *Botany of California* (1880) with co-author William Henry BREWER (1828-1910); curator of the Gray Herbarium at Harvard University (1888-1892); studied flora of western North America; eponyms: *Serenoa* (Bentham+J.D. Hooker,1883) Saw Palmetto; *Aristolochia watsoni* (Wooton+Standley, 1913) Watson Snakeroot; *Brickellia watsonii* (B.L.Robinson,1917) Watson Brickell Bush; *Casimiroa watsoni* (Engler ex P.Wilson,1911) Watson White Sapote; *Lysiloma watsoni* (Rose,1891) Watson Feather Bush; *Marah watsonii* [Cogniaux,1881] (E.L.Greene,1910) Watson Wild Cucumber

WHEELER, George Montague (1842-1905); American army major, surveyor and topographical engineer; director of fourteen surveys to the western United States (1871-1879); accompanied on some trips by the botanist Joseph Trimble ROTHROCK (1839-1922) who published descriptions of the collections; eponyms: *Dasyilirion wheeleri* (S.Watson,1879) Sotol, Desert Spoon; *Poa wheeleri* (Vasey,1874) Wheeler Blue Grass; also, Wheeler Peak (13,161 feet) highest point in New Mexico in the Sangre de Cristo range north of Taos named in his honor

WHIPPLE, Amiel Weeks (1817-1863); American army officer and surveyor; born October 21st 1817 in Greenwich, Massachusetts; son of David Whipple and Abigail Pepper; father ran inn in Concord; attended Amherst College one year prior to appointment to United States Military Academy at West Point (1836); graduated 5th in class of 41 (1841); commissioned to 1st artillery but quickly transferred to topographical engineers; worked on hydrographic surveys of Patapsco River in Maryland, river approaches to New Orleans, and harbor at Portsmouth, New Hampshire (1841-1843); met Eleanor Mary Sherburne in Portsmouth; married (September 12th 1843); had four children, one died in infancy; helped survey northeast boundary between United States and

Canada (1844-1849); surveyor and astronomer on Mexican Boundary Survey (1850-1853); crossed Texas from Indianola through San Antonio to El Paso (fall 1850); surveyed west from El Paso to Gila River and Pacific Coast; acted as temporary chief surveyor until Col. William H. Emory appointed to position; promoted first lieutenant (April 24th 1851); completed boundary survey report (spring 1853); chosen by War Department to direct new survey [later known as Whipple Expedition (1853-1854)] for possible transcontinental railroad route along 35th parallel from Fort Smith in Arkansas to Los Angeles; crew included surgeon and botanist John Milton BIGELOW, Swiss geologist and mining engineer Jules Marcou, German artist Heinrich Balduin Möllhausen and eight other civilian scientists; left Fort Smith (July 15th 1853), traveled up Canadian River, crossed Antelope Hills in Texas panhandle, left Canadian River and crossed Llano Estacado into New Mexico; followed trails marked earlier by Josiah GREGG (1840), James ABERT (1845), and Randolph Marcy and James Simpson (1849); crossed Pecos River and arrived at Rio Grande River at Albuquerque; continued west into Arizona and California; arrived in Los Angeles (February 4th 1853) and disbanded (March 21st 1853); sailed back to New York City; report confirmed feasibility of 35th parallel railroad route; Bigelow and Marcou collected specimens and geological data; Möllhausen paintings sparked interest in Europe; during Civil War, drew maps of northern Virginia battle sites; appointed chief topographical engineer for General Irvin McDowell; participated in first battle of Bull Run at Manassas (July 21st 1861); assigned to 3rd army corps (September 1862); participated in battle of Fredericksburg, Virginia (December 13-15); shot in stomach by Confederate sniper at battle of Chancellorsville (May 4th 1863) while constructing earthworks; taken to Washington, but died May 7th 1863; Lincoln had already signed promotion to major general of volunteers; posthumously awarded for wartime service; both sons received presidential appointments to military academies; eponyms: *Opuntia whipplei* (Engelmann+J.M.Bigelow,1856) Whipple Prickly Pear; *Penstemon whippleanus* (A.Gray,1862) Whipple BeardTongue; *Sclerocactus whipplei* [Engelmann+J.M. Bigelow,1856] (Britton+Rose,1922) {=*Echinocactus whipplei* (Engelmann+J.M.Bigelow,1856)} Whipple Stone Cactus; *Yucca whipplei* (Torrey,1859) Whipple Yucca; Fort Whipple [now part of Fort Myer reservation near Alexandria, Virginia] also named in his honor

WISLIZEN, Friedrich [Frederick] Adolph (1810-1889); German born American physician, plant collector, army surgeon and botanist; name also spelled WISLIZENUS or WISLIZENIUS; born in Koenigsee, Schwarzburg-Rudolstadt, in Germany; participated in unsuccessful student uprising; emigrated to United States (1835); settled in Illinois near St. Louis; practiced medicine but became restless; traveled with fur traders on Oregon Trail to Idaho (1839); joined second party through Colorado to Fort Bent on Santa Fe Trail; returned to St. Louis; published *A Journey to The Rocky Mountains in the Year 1839*; practiced medicine but again became restless; met botanist George Engelmann and learned plant collecting; traveled to Santa Fe and Chihuahua with traders just before start of Mexican War (1846); collected type specimen of western long-nosed leopard lizard near Santa Fe; traders suspected of carrying guns to Mexico; pursued by American soldiers under Colonel Stephen Kearney commander of Army of West; safely reached Mexico but captured by Mexican soldiers and imprisoned somewhere in Sierra Madre Occidental; permitted to wander two leagues from prison to collect rare plants; rescued by American troops; in gratitude, became army surgeon until end of war; returned to St. Louis

(1848); sent specimens to Asa Gray, George Engelmann and Alphonse DeCandolle in Europe; adventures published as government report *Memoirs of a Tour Through Northern Mexico* (1848) with sections describing plants by Engelmann; married, settled in St. Louis and became well-known and respected physician; helped found Missouri Historical Society and St. Louis Academy of Science; eponyms: *Wislizenia* (Engelmann, 1848) Jackass Clover; *W.refracta* (Engelmann, 1848) Wislizen Jackass Clover; *Agave wislizeni* (Engelmann, 1875) Wislizen Agave; *Dalea wislizeni* (A.Gray, 1849) Wislizen Indigo Bush; *Dimorphocarpa wislizeni* [Engelmann, 1848] (Rollins, 1979) {=*Dithyrea wislizeni* (Engelmann, 1848)} Wislizen Spectacle Pod; *Ferocactus wislizeni* [Engelmann, 1848] (Britton+ Rose, 1922) {=*Echinocactus wislizeni* (Engelmann, 1848)} Wislizen Barrel Cactus; *Hymenothrix wislizeni* (A.Gray, 1849) Wislizen Hymenothrix; *Quercus wislizeni* (A.DeCandolle, 1864) Wislizen Oak; also western long-nosed leopard lizard *Gambelia wislizenii* (Baird+Girard, 1852) {=*Crotaphytus wislizenii* (Baird+ Girard, 1852) named in his honor

WISTER, Charles Jones (1782-1865); American botanist, chemist and astronomer from Philadelphia; grandson of John Wister (born 1708) who emigrated from Heidelberg, Germany to Philadelphia in 1727 and joined his brother Casper who had arrived ten years earlier; became merchants who imported wines from Germany; their original residence on Market Street between 3rd and 4th Streets (according to legend) site where Benjamin Franklin erected first lightning rod; later built summer country house in 1744 in Germantown section of Philadelphia; used by Wister family (1744-1950); home and gardens now restored as museum; during Battle of Germantown (September 1777) house commandeered as headquarters of British General James Agnew who was wounded and died in front parlor; blood stains still visible on floor; Sally Wister lived in house during Revolution; bedroom still displayed; sent to Lower Gwynedd, Pennsylvania when house occupied; wrote diaries still available today; house used by Wister family in winter 1793 as refuge from yellow fever epidemic raging in Philadelphia; Charles converted house to year-round residence and named it *Grumblethorpe* after reading humorous 19th-century book *Thinks I to Myself* by Edward Nares; kept daily weather diary for decades; made finely-crafted equipment for botany, astronomy and chemistry projects; became merchant with older brother John; their company *John Wister and Charles Jones Wister* at 143 High Street sold butcher knives and fine English cutlery; author Owen Wister spent childhood summers at house; desk where he wrote *The Virginian* still on display; Charles discovered (May 3rd 1828) following type specimen named in his honor along east side of Schuylkill River between falls and Wissahicon Creek; received (spring 1828) by Solomon White Conrad (1779-1831) and published in *Journal of the Academy of Natural Sciences of Philadelphia* (1829); eponyms: *Corallorhiza wisteriana* (Conrad, 1829) Wister Coral Root, Spring Coral Root

WOLF, John (1820-1897); American botanist and naturalist from Illinois; accompanied expedition led by George Montague WHEELER (1842-1905); collected plants under direction of Joseph Trimble ROTHROCK (1839-1922) especially in 1873; eponyms: *Ribes wolfii* (Rothrock, 1874) Wolf Currant; *Sporobolus wolfii* (Vasey, 1883) {=*Vilfa ramulosa* (Humboldt+ Bonpland+Kunth, 1816); =*Sporobolus ramulosus* [Humboldt+Bonpland+Kunth, 1816] (Kunth, 1829); =*Muhlenbergia wolfii* [Vasey, 1883] (Rydberg, 1905); =*Muhlenbergia ramulosa*

[Humboldt+Bonpland+Kunth,1816] (Swallen,1947)} Wolf Drop-Seed Grass; *Trisetum wolfii* (Vasey,1874)

WOODS, Joseph (1776-1865); English architect, botanist and geologist; born August 24th in Stoke Newington, north of London; father and uncle founding Quaker abolitionists of London Abolition Committee; educated by parents Joseph and Margaret Woods in Latin, Greek, Modern Greek, Hebrew, Italian and French; studied architecture under Daniel Asher Alexander (c.1792); founded London Architectural Society and became first president (1806); visited France, Switzerland and Italy to study botany and architecture (1816); publications: *Synopsis of the British Species of Rosa* published in *Transactions of the Linnaean Society* [1818]; *Letters of an Architect* [1828]; travel notes published in *The Botanical Magazine Companion* [1835-1836] and *The Phytologist* [1843]; *The Tourist's Flora* [1850] catalogue of flowering plants and ferns of Britain, France, Germany, Switzerland and Italy; member of Society of Antiquaries; honorary member of Society of British Architects; fellow of Geological Society; fellow of Linnaean Society; eponyms: *Woodsia* (R.Brown,1810) Cliff Ferns; *Rosa woodsii* (Lindley,1820) Wood's Rose; *Woodsia oregana* (D.C. Eaton,1865) Oregon Cliff Fern

WOOTON, Elmer Ottis (1865-1945); American botanist; studied flora of New Mexico; appointed state chemist and state botanist at Agricultural Experiment Station in Las Cruces (1890) and also professor of chemistry, botany and biology at New Mexico College of Agricultural and Mechanical Arts (1890-1911) in Las Cruces [now New Mexico State University]; started the NMSU herbarium (1890); collected over 5000 plants throughout New Mexico (1890-1911), at Grand Canyon in 1892 and south of Juarez in Mexico (1900); by 1911 herbarium had over 35,000 specimens: his own, students, Paul Carpenter Standley's and duplicate exchanges with other institutions, including collections from central Texas made by Ferdinand Jacob LINDHEIMER (1801-1879) in 1850; transferred to Bureau of Plant Industry in Washington, DC, and worked for United States Department of Agriculture (1911-1935); his co-author Paul Carpenter STANDLEY (1884-1963) worked at the Smithsonian; books: *Descriptions of New Plants Preliminary to a Report Upon the Flora of New Mexico* (1913); *Flora of New Mexico* (1915); *Trees and Shrubs of New Mexico**** [19-?]; eponyms: *Abronia wootonii* [Standley, 1909] (Tidestrom,1935) {=*Tripterocalyx wootonii* (Standley,1909)} Sand Verbena; *Brickellia lemmonii* var. *wootonii* [E.L.Greene,1897] (B.L.Robinson,1917) {=*Coleosanthus wootonii* (E.L.Greene,1897)} Wooton Brickell Bush; *Cheilanthes wootoni* (Maxon,1918) Wooton Lip Fern; *Crataegus wootoniana* (Eggleston,1907) Wooton Hawthorn; *Delphinium wootonii* (Rydberg,1899) Wooton Larkspur; *Senecio wootonii* (E.L.Greene,1898) Wooton Ragwort; *Xanthium wootoni* (Cockerell,1915) Wooton Cocklebur

WRIGHT, Charles [Carlos] (1811-1885); American botanical explorer and plant collector; worked for Asa GRAY (1810-1888) in Texas (1849) and in New Mexico and Arizona (1850-1851); surveyor and botanist on Mexican Boundary Survey (1851-1853); southwest collections published by Gray in *Plantae Wrightianae* (1852); botanist on Ringgold-Rodgers Expedition to Pacific northwest (1853-1856); collected in Cuba and Santo Domingo for 11 years; his early Carribean collections published by August Heinrich Rudolph GRISEBACH

(1814-1879) in *Plantae Wrightianae* (1860); eponyms: *Carlowrightia* (A.Gray,1878) Wright Wort; *C.linearifolia* [Torrey, 1859] (A.Gray,1878) {=*Schaueria linearifolia* (Torrey, 1859)} Heath Wrightwort; *Acourtia wrightii* [A.Gray,1852] (J.L.Reveal+R.M.King,1973) {=*Perezia wrightii* (A.Gray,1852)} Wright Desert Peony; *Aloysia wrightii* (A.Heller ex Abrams, 1906) Wright Bee Brush; *Aristida wrightii* (Nash,1903) Wright Three-Awn Grass; *Aristolochia wrightii* (Seemans,1856) Wright Snakeroot; *Baccharis wrightii* (A.Gray,1852) Wright Desert Broom; *Bothriochloa wrightii* [Hackel,1885] (Henrard,1941) {=*Andropogon wrightii* (Hackel, 1885)} Wright Beard Grass; *Buddleja wrightii* (B.L.Robinson,1891) Wright Butterfly Bush; *Cheilanthes wrightii* (W.J.Hooker,1858) Wright Lip Fern; *Cordylanthus wrightii* (A.Gray,1859) Wright Bird Beak; *Datura wrightii* (Regel,1859) Wright Jimsonweed/Thornapple; *Eriogonum wrightii* (Torrey ex Bentham,1856) Wright Buckwheat Bush; *Garrya wrightii* (Torrey,1857) Wright Silk Tassel; *Gnaphalium wrightii* (A.Gray,1882) Wright Everlasting; *Gutierrezia wrightii* (A.Gray,1853) Wright Snakebroom; *Houstonia wrightii* (A.Gray,1882) Wright Bluet; *Hymenothrix wrightii* (A.Gray,1853) Wright Hymenothrix; *Lotus wrightii* [A.Gray,1853] (E.L.Greene, 1890) {=*Hosackia wrightii* (A.Gray,1853) Wright Birdfoot Trefoil; *Muhlenbergia wrightii* (Vasey ex J.M.Coulter,1885) Wright Muhly Grass; *Panicum wrightianum* (Scribner, 1898) Wright Panic Grass; *Pappophorum wrightii* (S.Watson,1883) Wright Pappus Grass; *Pellaea wrightiana* (W.J.Hooker,1858) Wright Cliff Brake Fern; *Platanus wrightii* (S.Watson, 1875) Wright Sycamore; *Sageretia wrightii* (S.Watson, 1885) Wright Sageretia; *Solidago wrightii* (A.Gray, 1880) Wright Goldenrod; *Sporobolus wrightii* (Munro ex Scribner, 1882) {=*Sporobolus airoides* var. *wrightii* [Munro ex Scribner, 1882] (Gould,1949) Wright Giant Sacaton Grass; *Thelypodium wrightii* (A.Gray,1852) Wright Prince's Plume

ZINN, Johann Gottfried (1727-1759); German ophthalmologist, anatomist and botanist; born December 4th 1727 in Ansbach, Mittelfranken; began medical studies in Ansbach; then studied with Albrecht von HALLER (1798-1777) at University of Göttingen; received doctorate (1749); studied anatomy, ophthalmology and botany in Berlin (1750-1753); first to accurately describe vessels and nerves in the human eye; professor of medicine and botany at University of Göttingen and director of the botanical garden (1753-1759); died April 6th, 1759, in Göttingen at age 32; books: *Descriptio Anatomica Oculi Humani* – historic work in ophthalmology; eponyms: *Zinnia* (Linnaeus,1759) Garden Zinnia; *Z.grandiflora* (Nuttall,1840) Wild Zinnia; also named in his honor: Zinn's artery (central retina artery), Zinn's ligament (connective tissue of erectus muscles in eye), Zinn's membrane (anterior iris layer), Zinn's vascular circle (arteries on sclera around intraocular portion of optic nerve), Zinn's zone (fiber system holding lens in place)