A List of Master's These and Ph.D. Dissertations from NMSU and UNM Relating to Floristics and Taxonomy

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At least 43 theses and dissertations from New Mexico State University and University of New Mexico relating to floristics and taxonomy have been written since graduate programs began at these institutions. Many other studies dealing with vegetation, ethnobotany, reproduction, evolution, remediation, ecology, and related topics have been completed, but are not listed here. The criteria for inclusion in this list are relatively narrow. The studies must be 1) a flora of a discrete area (e.g., Columbus 1988), or 2) concerned with comparisons within or between groups of plants (e.g., Loomis 1983, Nisbet 1942), or 3) related to rare plants within the state (e.g., Burks 1994). The purposes of this list are to bring to light some of these useful and possibly unknown documents and to contribute to a future bibliography of New Mexico floristics. Copies of the theses or dissertations are found in the libraries of the respective institutions.

New Mexico State University


Columbus, J. Travis. 1988. Flora of Cooke’s Range, southwestern New Mexico. MS Thesis. [Luna County]

Fox, William E. 1993. A field guide to selected New Mexico locoweeds and milkvetches. MS Thesis. [19 species of toxic Astragalus and Oxytropis]


Niles, Wesley E. 1961. A winter key to the trees and shrubs of the Chiricahua Mountains and adjacent areas of southwestern Arizona. MS Thesis.

Roalson, Eric H. 1995. A floristic inventory of the upper main Diamond Creek drainage area. MS Thesis. [Black Range, Gila National Forest, Sierra County]


Standley, Paul Carpenter. [abt 1905]. A statistical study of Echinocereus polyacanthus Engelm. and its nearest allies as represented by plants growing near the Agricultural Station. Senior Thesis.

Standley, Paul Carpenter. 1909. Original papers on botanical subjects. Portion of MS Thesis?

Standley, Paul Carpenter. 1909. The Allioniaceae of the United States with notes on Mexican species. MS Thesis. [Not found in NMSU library]


University of New Mexico


Rominger, James McDonald. 1955. Contributions to the Gramineae of Bernalillo County, New Mexico. MS Thesis.


**Herbaria of New Mexico**

by Carolyn Dodson


One of the last states to be explored botanically, New Mexico’s first plant specimens were collected in the 1830s (McKelvey, Botanical exploration of the Trans-Mississippi West, 1955). Poorly explored areas still exist in the state.

Moreover, the present size of herbarium collections in New Mexico is markedly smaller than that of neighboring states, in spite of the great diversity in topography and the complex floristic composition of the state. The combined number of specimens in the two largest collections in New Mexico is 158,000, compared with 425,000 specimens in the largest two collections in Arizona, 485,000 in Colorado and 1,272,000 in Texas (Holmgren et al., Index herbariorum part I: The herbaria of the world. 7th ed. 1981). The paucity of study specimens increases the probability that small local collections may well contain forms not found in the larger collections. This directory is compiled to inform students of New Mexico botany of the smaller, local collections available in the state.

Data for this list were collected from questionnaires mailed to 60 institutions including colleges and universities, national parks and monuments, national wildlife refuges, selected museums, and BLM district offices. Telephone calls were made to non-responders and a few herbaria were visited. From the results, 20 collections were judged
appropriate for listing. Collections of less than 200 specimens, and those without data for specimens are not included. Six of the collections have Index Herbariorum standard acronyms; most of the rest probably will never be accessible in the Index. The data for the 20 collections are current as of December 1989. Although I am reasonably certain that this list is complete, I would appreciate hearing of other herbaria for inclusion in an updated list.

The largest collection, at the University of New Mexico, has 100,000 specimens. Next in size is New Mexico State University with 58,000 specimens. Eleven hold between 1000 and 15,000; seven contain less than 1000 specimens.

In 1888 the first herbarium in the state was established, at the State University of New Mexico at Las Cruces. It was the only collection in New Mexico until the 1920s, when the University of New Mexico, Cibola National Forest, and Carlsbad National Park set up herbaria.

Abbreviations used are: No. = number of specimens in the collection; Spec. = specializations of the collections; Imp. coll. = important collections and collectors; Cur. res. = current research at the herbarium.

Alamogordo


Albuquerque


University of New Mexico Herbarium and Museum of Botany (UNM) — Museum of Southwestern Biology, Department of Biology, University of New Mexico, Albuquerque, 87131. (505)277-5330. Curator: Timothy Lowrey. No.: 100,000. Spec.: New Mexico and surrounding areas. Imp. coll.: Cacti - E.F. Castetter; Prince Pearce. Grasses - E.F. Castetter; W.C. Martin; R. Fletcher; L.D. Potter; W. Springfield. General collections - E.F. Castetter; H. Dittmer; L.D. Potter; W.C. Martin; R. Fletcher; P. Knight; C.R. Hutchins; Aven Nelson; Dunn and Lint; Los Medanos (WIPP). Cur. res.: Floristics of New Mexico; Ethnobotany; Biochemical Taxonomy; Distribution.


San Juan College Herbarium (NMSJ) — 4601 College Blvd., Farmington, 87401. (505)326-3311 ext 358. Curator: Kenneth D. Heil. No.: 12,000. Spec.: Four Corner Region, Baja Calif., Big Bend Region, TX, SE Utah; Colorado alpine. Imp. coll.: Astragalus, Atriplex, Cactaceae. Cur. res.: Cactaceae, Eriogonum, Gilia.

Las Cruces


New Mexico State University Herbarium (NMC) — Biology Department, New Mexico State University, Las Cruces, 88003. (505)646-3121. Curator: Richard Spellenberg. No.: 58,000. Spec.: New Mexico and northern Mexico. Imp. coll.: Wooton, Standley, Spellenberg. Cur. res.: Floristics of New Mexico and northern Mexico, systematics of Nyctaginaceae, Astragalus, Poaceae, Quercus.


Las Vegas

Los Alamos


Portales


Santa Fe


Silver City

Department of Natural Science Herbarium (SNM) — Western New Mexico university, Silver City, 88061. (505)538-6423. Curator: Terry Heiner. No.: 6000. Spec.: Southwestern NM.


Socorro


New Plant Distribution Records
New records for New Mexico are documented by the county of occurrence and the disposition of a specimen (herbarium acronym).

— From Tom Todsen (2000 Rose Lane, Las Cruces, NM 88005)
  *Diodia teres* Walt. var. *setifera* Fern. (Rubiaceae): Hidalgo County (NMC)
  *Erythronium grandiflorum* Pursh (Liliaceae): Rio Arriba County (NMC)

— From Jack Carter (P.O. Box 1244, Silver City, NM 88062) and Charles Huff (P.O. Box 1595, Silver City, NM 88062)
  *Abutilon incanum* (Link) Sweet subsp. *pringlei* (Hochr.) Felger & Lowe (Malvaceae): Luna County (SNM,UNM).

— From Robert Dorn (P.O. Box 1471, Cheyenne, WY 82003)
  *Salix arizonica* Dorn (Salicaceae): Taos County (Dorn Personal Herbarium).
  *Salix brachycarpa* Nutt (Salicaceae): Taos County (Dorn Personal Herbarium).

— Allred & Valdes-R. (1995; see literature reports)
  *Aristida purpurea* Nutt. var. *perplexa* Allred & Valdes-R. (Gramineae): several NM counties (NMC,NMCR).

— Heil & Porter (1994; see literature reports):
  *Sclerocactus cloveriae* Heil & Porter subsp. *brackii* Heil & Porter (Cactaceae): San Juan County (SJNM).

— Hess & Sivinski (1995; see literature reports)
  *Zygadenus mogollonensis* Hess & Sivinski (Liliaceae): Catron County (NMC,UNM).

— Nesom (1995; see literature reports):
  *Chaptalia texana* Greene (Asteraceae): Dona Ana County (MO,NY,US).

— Enquist & Crozier (1995; see literature reports)
  *Anemone tuberosa* Rydb. var. *texana* Enquist & Crozier: Eddy County (TEX-LL).

**Literature Reports**

**Taxonomy and Floristics**


[Anderson, D.J.]. 1995. Floral checklist for White Sands Missile Range, New Mexico. White Sands Missile Range, Environmental Services Division. [This is a draft, unpublished checklist.]


Goodman, G.J. & C.A. Lawson. 1995. Retracing Major Stephen H. Long’s 1820 Expedition. University of Oklahoma Press, 366 p. [An invaluable guide to this important scientific expedition to the west, from which over 100 new species of plants were named; the party spent 10 days in New Mexico; includes copious notes on the plants.]

Hayward, B.J., T.C. Heiner, & B.F. Miller. 1978?. Resource Inventory of the Alamo Hueco-Big Hatchet-Sierra Rica Mountain Complex. BLM.


Holmgren, N.H. 1994. Redefinition of Dodecatheon dentatum (Primulaceae) and rationale for use of varietal rank. [Reduction of Dodecatheon ellisiae to a variety of D. dentatum.]
Ivey, R.D. 1995. Flowering Plants of New Mexico. 3rd Edition. Published by the
author, 9311 Headingly Ct., NE, Albuquerque, NM 87111. [An exceptional portfolio of
line drawings of New Mexico plants; very nearly a “portable herbarium.”]

North America. Yale University Press, Box 209040, New Haven, CT 06520. ISBN 0-
300-06207-9. [Though a long ways from New Mexico, there should be numerous useful
pages here.]

Operations; Luna, Dona Ana, and Hidalgo Counties, New Mexico. U.S. Army Corps of
Engineers, Albuquerque, and Joint Task Force Six, Fort Bliss.

of Arizona Press, Tucson. ISBN 0-8165-1580-8. [Chapters on growth forms, history,
landscape evolution, fire, invertebrates, vertebrates, human influence, & vegetation.]

McDonald, J.A. 1995. Revision of Ipomoea section Leptocallis (Convolvulaceae).

and continental Central America. Phytologia 78:153-188. [Chaptalia texana Greene]


Peterson, P.M., R.D. Webster, & J. Valdes-Reyna. 1995. Subtribal classification of the

Peterson, R. 1993. Plants of San Andres Canyon, Otero County, New Mexico.
Distributed by the author (New Mexico Natural History Institute, 1750 Camino Corrales,
Santa Fe, NM 87505).

replaces M. virescens (Kunth) Trinius in NM.]

Schuyler, A.E. 1974. Typification and application of the names Scirpus americanus
synonymy of S. olneyi with S. americanus.]

Sivinski, R. 1995. A botanical inventory of Pecos National Historical Park, New
Mexico. National Park Service, Southwest Regional Office, Box 728, Santa Fe, NM
87504. [Includes information on plant communities, endangered plants, management, and
a species list.]

Smith, S.G. 1995. New combinations in North American Schoenoplectus,
Bolboschoenus, Isolepis, and Trichophorum (Cyperaceae). Novon 5:97-102. [Correct names for taxa segregated from Scirpus sensu lato.]


Rare, Threatened, and Endangered Plants


Spellenberg, R. 1979. A report on the survey for threatened and endangered plant species in Guadalupe Canyon and vicinity, Hidalgo Co., N.M. Heritage Program, New Mexico Department of Natural Resources. [Sophora formosa, Vauquelinia pauciflora]


Miscellaneous, Agriculture, Ecology


Dunmire, W.W. & G.D. Tierney. 1995. Wild Plants of the Pueblo Province. [Available from William Dunmire, 12 Camino a las Estrellas, Placitas, NM 87043 for $29.95 (cloth) or $19.95 (paper) plus $3.50 shipping.]


Journals, Newsletters, Etc.

Aridus. Bulletin of the Desert Legume Program of the Boyce Thompson Southwestern Arboretum and the University of Arizona. P.O. Box 3607, College Station, Tucson, Arizona 85722.

Compositae Newsletter. [Bertil Nordenstam, Dept. of Phanerogamic Botany, Box 50007, S-104 05 Stockholm, Sweden. Subscription gratis.]

Cyperaceae Newsletter. [P. Goetghebeur & D.A. Simpson, eds, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, England. Subscription $8 (cash only).]

Journal of the Southwest 37(2). 1995. [This entire issue is devoted to the Explorations on the Rio Mayo, in Sonora, Mexico, centered around the early work of Howard Scott Gentry. A must for Gentryophiles.]

The Kew Record of Taxonomic Literature. Royal Botanic Gardens, Kew. London: HMSO. [Reports of taxonomic literature of the world, organized by family, region, and discipline.]

The Mesquite Grill. Newsletter of the Southwest Environmental Center, 1494A South Solano Drive, Las Cruces, NM 88001.

Orion Magazine. Myrin Institute, 136 E. 64th St., New York, NY 10021. [Exceptionally fine nature writing on a variety of topics.]