

## ADDITIONS TO THE VASCULAR PLANT TYPE COLLECTION OF THE OHIO STATE UNIVERSITY HERBARIUM<sup>1</sup>

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**ABSTRACT.** Fifty-three type specimens of vascular plants are reported as additions to the type collection of The Ohio State University Herbarium, bringing the total number to 276. These include both recent acquisitions and newly recognized type material already in the collection. For each specimen, the name of the taxon, collection data, kind of type specimen, and source are provided.

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### INTRODUCTION

The Ohio State University Herbarium contains approximately 311,000 specimens of vascular plants: 150,000 from Ohio, 145,000 from the remainder of the United States and Canada, 13,500 from Latin America, and 2,500 from the rest of the world (Furlow 1982, Cusick and Snider 1982). Stuckey and Wentz (1974) listed 223 of these as type specimens and noted that many were derived from historically important collections. Three of these collections have been discussed in detail: the T. H. Kearney, Jr., personal herbarium (Wentz 1974), W. A. Kellerman's collection of Guatamalan vascular plants (Lowden 1970), and the L. M. Underwood and A. D. Selby collection of vascular plants from Colorado (Stuckey and Hawk 1974).

The present paper lists type specimens added to the Ohio State University Herbarium's type collection during the past decade. This addendum includes 53 type specimens representing 49 taxa, which brings the total number of specimens in the type collection to 276. Some of these specimens represent recent acquisitions, while others are specimens in the main collection which were only recently identified as types. Holotypes, isotypes, isolectotypes, syntypes, isosyntypes, neo-

types, and isoneotypes are included. Paratypes and topotypes are omitted, although many have been identified in the main collection.

For each taxon, the following information is given: the basionym and its place of publication, label data, the Herbarium accession number, the kind of type, and the source of the specimen. If the specimen in the Ohio State University Herbarium is a duplicate (isotype, isolectotype, isosyn-type, or isoneotype), the location of the original material (holotype, lectotype, syntype, or neotype) is cited. The terminology for type designations and herbarium acronyms are in accordance with *The International Code of Botanical Nomenclature* (Stafleu et al. 1978) and *Index Herbariorum* (Holmgren et al. 1981), respectively.

In discussing the origins of the type specimens in the Ohio State University Herbarium, Stuckey and Wentz (1974) listed 17 "original source collections" and provided information for each on its size, composition, acquisition, and other particulars. In the present paper, the index numbers assigned to these collections by Stuckey and Wentz (1974) are retained and 2 new numbers are added. The number 18 designates type specimens deposited since 1972 by persons associated with the Herbarium. The number 19 designates type specimens deposited since 1972 by persons not associated with the Herbarium. Also, number 12, the collections of L. R. Stanford et al. from Coahuila, Mexico, in

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1941, has been modified to include material obtained in Tamaulipas on the same expedition. The source collections represented by specimens in the present paper are listed here:

1. collections from various sources.
  2. Thomas H. Kearney, Jr., personal herbarium; (E.) Thomas H. Kearney, Jr., collections; (G.) George V. Nash collections; (I.) other types.
  3. *Plantaes Exsiccatae Grayana*. 12. L. R. Stanford, K. L. Rutherford and R. D. Northcraft collections from Coahuila and Tamaulipas, Mexico.
  17. James A. Duke collections from Panama.
  18. specimens deposited since 1972 by persons associated with the Herbarium.
  19. specimens deposited since 1972 by persons not associated with the Herbarium.
- Complete information on these collections is provided by Stuckey and Wentz (1974).

#### CATALOGUE OF TYPE SPECIMENS

*Acantholimon serotinum* Rech. f. and Schiman-Czeika, Fl. Iranica 108: 96. 1974. Iran: Fars; 35 km W of Darab, 8 Dec 1964, M. L. Grant 16971, OS-153467, Isotype (19). Holotype W.

*Alnus jorullensis* subsp. *lutea* Furlow, Ann. Missouri Bot. Gard. 63: 38. 1977. Mexico: Michoacan; 8 km N of Uruapan, 28 Nov 1971, J. J. Furlow 330, OS-153504, Isotype (18). Holotype MSC!

*Amphipogon caricinus* var. *scabra* J. Vickery, Contrib. New South Wales Herb. 1:291. 1950. Australia: Queensland; Stanthorpe, 11 Mar 1931, C. E. Hubbard 5688, OS-153514, Isotype (19). Holotype NSW.

*Berberis wilcoxii* Kearney, Trans. New York Acad. Sci. 14:29. 1894. Arizona: [Cochise Co.]; Ft. Huachuca, 1893, T. E. Wilcox s.n., OS-153510, Syntype (21).

*Betula-alnus maritima* Marshall, Arbust. Amer. 20. 1785. Delaware: Sussex Co.; 4 mi. S of Milford on the west shore of Hudson's Pond, 14 Sep 1970, J. J. Furlow 205, OS-153503, Isoneotype (18). Neotype MSC!

*Breweria pickeringii* var. *pattersonii* Fern. and Schub., Rhodora 51:42. 1949. Illinois [Henderson Co.]; Oquawka, Aug 1873, N. H. Patterson s.n., OS-154717 and OS-154718, Isotypes (21). Holotype F.

*Cavendishia darienensis* Luteyn, Brittonia 28:43. 1976. Panama: Darien; Rio Balsa, between Manane and Arete, 26 Jul 1967, J. A. Duke 13509, OS-154721, Isotype (17). Holotype US.

*Cavendishia lebroniae* Luteyn, Brittonia 31:156. 1979. Ecuador: Canar; El Triunfo-Canar road,

33 km E of El Triunfo, 18 Apr 1978, J. L. Luteyn & M. Lebron-Luteyn 5759, OS-150869, Isotype (19). Holotype NY.

*Cavendishia morii* Luteyn, Brittonia 28:401. 1976. Panama: Darien; Cerro Pirre, 11 Apr 1967, N. Bristan 587(3), OS-154722, Isotype (17). Holotype DUKE.

*Chrysanthellum pilzii* Strother, Madroño 23:358. 1976. Mexico: Oaxaca; ca. 1 km E of Salina Cruz, ca. 16° 12' N, 95° 09' W, 22 Jul 1971, J. L. Strother and G. E. Pilz 1094, OS-153509, Isotype (19). Holotype UC.

*Coreopsis mutica* var. *carnosifolia* Crawford, Brittonia 22:110. 1970. Mexico: Oaxaca; along Rt 190, 15.8 mi NW of bridge over Rio Hondo and 40.6 mi SE of Totolapan, 15 Sep 1967, T. E. Melchert, D. J. Crawford and J. E. Averett 67-86, OS-150881, Isotype (18). Holotype IA.

*Coreopsis mutica* var. *multiligulata* Crawford, Brittonia 22:110. 1970. Mexico: Oaxaca, along Rt 190, 42 mi W of Tehuantepec, 24 Sep 1966, T. E. Melchert, P. D. Sorenson and D. J. Crawford 6469, OS-150883, Isotype (18). Holotype IA.

*Coreopsis mutica* var. *simplicifolia* Crawford, Brittonia 33:551. 1981. Mexico: Guanajuato; 6-7 km E of Guanajuato from El Centro on a gravel road to Monte de San Nicolas, along a small canyon of the Rio Piletas, 29 Sep 1980, D. J. Crawford, T. F. Stuessy and J. L. Bruner 1367, OS-153494, Holotype (18).

*Cyperus louisianensis* Thieret, Proc. Louisiana Acad. Sci. 40:23. 1977. Louisiana: Tangipahoa Parish; along road to Lee's Landing, ca. 7 mi. E of Ponchatoula, 1 Oct 1972, J. W. Thieret 33585, OS-125524, Isotype (19). Holotype GH.

*Erigeron piperianus* Cronq., Brittonia 6:197. 1947. Washington: Grant Co.; north of Soap Lake in the Grand Coulee, 18 May 1935, J. W. Thompson 11490, OS-153508, Isotype (1). Holotype NY.

*Erigeron rybius* Nesom, Syst. Bot. 7:457. 1982. New Mexico: Otero Co.; 1.6 km S of Cloudcroft on Hwy 24, 30 Aug 1981, G. Nesom 4535, OS-154139, Isotype (18). Holotype NY.

*Erigeron stanfordii* I. M. Johnston ex Nesom, Madroño 28:140. 1981. Mexico: Tamaulipas; 19 km SE of Miquihuana on road to Palmillas, 11 Aug 1941, L. R. Stanford, K. L. Rutherford and R. D. Northcraft 838, OS-153515, Isotype (12). Holotype GH.

*Erigeron wellsi* Nesom, Madroño 28:136. 1981. Mexico: Tamaulipas; 4 km W of Miquihuana, 4 Aug 1941, L. R. Stanford, K. L. Rutherford and R. D. Northcraft 631a, OS-153516, Isotype (12). Holotype NY.

*Galinsoga elata* Canne, Rhodora 79:340. 1977. Mexico: Queretaro; ca. 1.5 mi E of Pinal de Amoles, road between Vizarron and Jalpan, ca. 21° 10' N, 99° 38' W, 8 Nov 1970, G. L. Webster and

- G. J. Brecken* 16302, OS-153473, Isotype (19). Holotype DAV.
- Juncux X stuckeyi* Reinking, Brittonia 33:175. 1981. Ohio: Erie Co.; bottom of Deep Northwest Quarry, north portion of Kelley's Island, Lake Erie, 29 Jun 1979, M. F. Reinking 612, OS-154138, Holotype (18).
- Kneiffia semiglandulosa* Pennell, Bull. Torrey Bot. Club 46:369. 1919. Mississippi: [Harrison Co.]; Biloxi, 21 Apr 1898, S. M. Tracy 5064, OS-153507, Isotype (1). Holotype US.
- Louteridium tamaulipense* A. Richardson, Sida 3:448. 1969. Mexico: Tamaulipas; about 5 km by road NW of Gomez Farias, 30 Jun 1969, A. Richardson 1388, OS-122058, Isotype (19). Holotype TEX.
- Mimulus gemmiparus* W. A. Weber, Madroño 21:423. 1972. Colorado: Larimer Co.; Rocky Mountain National Park, Old Fall River Road, 8 Jul 1970, W. A. Weber and T. Grove 14062, OS-153472, Isotype (19). Holotype COLO.
- Montanoa imbricata* V. A. Funk, Mem. New York Bot. Gard. 36:116. 1982. Mexico: Guerrero; 43.6 mi S of Chalpancingo and 2.3 mi S of El Ocotito along Hwy 95, 16 Nov 1978, V. A. Funk and M. L. Rico 2840, OS-128225, Holotype; OS-128222 and OS-128224, Isotypes (18).
- Montanoa laskowskii* McVaugh, Contr. Univ. Michigan Herb. 9:423. 1972. Mexico: Jalisco; along road between Autlan and Barra de Navidad (Hwy 80), 16 mi SW of LaHuerta, 26 Sep 1966, W. R. Anderson and C. W. Laskowski 3777, OS-153471, Isotype (19). Holotype MICH.
- Montanoa revealii* H. Robinson, Phytologia 33:285. 1976. Mexico: Guerrero; Sierra Madre del Sur, along the Milpillas-Atoyac road via Puerta del Gallo, about 42.5 mi SW of Hwy 95, 11.5 mi SW of Filo de Caballo, and 6.3 mi SW of Carrazal del Bravo, 16 Oct 1975, J. L. Reveal, K. M. Peterson, R. M. Harley and C. R. Broome 4233, OS-153469, Isotype (19). Holotype US.
- Montanoa tomentosa* Cerv. in Llave and Lex., Nov. Veg. Descr. 2:11. 1825. Mexico: Dist. Federal; immediately west of Avenue Insurgentes and south of the Universidad Nacional Autónoma de Mexico, 3 Sep 1976, R. L. Hartman and V. A. Funk 4225, OS-122974, Neotype (18).
- Najas guadalupensis* var. *floridana* Haynes and Wentz, Sida 5:262. 1974. Florida: Dade Co.; along SR 94 (east end) off US Rt 41 at edge of Everglades National Park, 5 Apr 1972, W. A. Wentz 670, OS-153501, Isotype (19). Holotype US.
- Neea amplexicaulis* Dwyer and Hayden, Phytologia 14:139. 1966. Panama: Darien; Rio Pirre, Apr 1966, J. A. Duke and N. Bristan 8288, OS-153512, Isotype (17). Holotype MO.
- Orthaea fimbriata* Luteyn, Brittonia 31:160. 1979. Ecuador: Morona-Santiago; Gualaceo-Limon road, 53-64 km E of Gualaceo, 19 Apr 1978, J. L. Luteyn and M. Lebron-Lutelyn 5794, OS-150862, Isotype (19). Holotype NY.
- Panicum haemocarpon* Ashe, J. Elisha Mitchell Sci. Soc. 15:55. 1898. District of Columbia: Washington, near Soldier's Home, 6 Jun 1897, T. H. Kearney, Jr., s.n., OS-153475, Isolectotype (2E). Lectotype NY.
- Panicum helleri* Nash, Bull. Torrey Bot. Club 26:572. 1898. Texas: Kerr Co.; Kerrville, 14-21 May 1894, A. A. Heller 1759, OS-153506, Isotype (2G). Holotype NY.
- Pectis gracilis* Baker in Mart., Fl. Bras. 6(3):290. 1884. Brazil: Minas Geraes; cidade de Uberava, 29 Nov 1848, A. F. Regnel III.789, OS-154723, Isotype (19). Holotype K.
- Perityle rupestris* var. *albiflora* Powell, Sida 3:180. 1967. Texas: Brewster Co.; ca. 3 mi W of Alpine in Toronto Pass, 3 Jul 1965, A. M. Powell and S. Sikes 1320, OS-122073, Isotype (19). Holotype SRSC.
- Perityle turneri* Powell, Madroño 21:456. 1972. Mexico: Chihuahua; 3-4 mi E of El Palmito, 2 Apr 1970, A. M. Powell 1858, OS-122050, Isotype (19). Holotype TEX.
- Philadelphus microphyllus* subsp. *maculatus* C. L. Hitchcock, Madroño 7:44. 1943. Mexico: Tamaulipas; 7 km SW of Miquihuana, 5 Aug 1941, L. R. Stanford, K. L. Rutherford and R. D. Northcraft 690, OS-153505, Isotype (12). Holotype WTU.
- Populus simaroa* Rzedowski, Bol. Soc. Bot. Mex. 35:37. 1975. Mexico: Mexico; La Ciénega, 5 km S of Sultepec, 29 Apr 1973, J. Rzedowski 30469, OS-127019, Isotype (19). Holotype ENCB.
- Potamogeton ogdenii* Hellquist and Hilton, Syst. Bot. 8:88. 1983. New York: Columbia Co.; Beebe Pond near Queechy Lake, 5 Aug 1970, S. J. Smith and E. C. Ogden 45590, OS-153495, Isotype (19). Holotype NYS.
- Rubus X grantii* A. Gilli, Fl. Iranica 66:74. 1969. Iran: East Azerbaijan; west side of Hasi Amir Pass on Russian border, 28 km NE of Ardebil, 21 Jul 1964, M. L. Grant 16303, OS-153468, Isotype (19). Holotype W.
- Rubus parviflorus* var. *velutinus* f. *parvifarius* Fassett, Ann. Missouri Bot. Gard. 28:325. 1941. California: Alameda Co.; Strawberry Creek Canyon, 0.7 mi above its mouth, Berkeley, 4 Aug 1938, L. Constance 2397, OS-153476, Isotype (1). Holotype WIS.
- Rudbeckia beadlei* Small, Fl. Southeast. US 1258. 1903. North Carolina: Buncombe Co.; Cedar Cliff Mountain, 2 Aug 1897, Biltmore Herbarium 4498, OS-153474, Isolectotype (2I). Syntype NY.
- Saxifraga tennesseensis* Small, Bull. Torrey Bot. Club 23:364. 1896. Tennessee: Knox Co.; cliffs on the Tennessee River, 10-30 Apr 1893, T. H. Kearney, Jr., s.n., OS-153497, Isolectotype (2E). Syntype NY.

*Scirpus saximontanus* Fern., Rhodora 3:251. 1901. Texas: C. Wright s.n., OS-153477, Isosyntype (3). Syntype GH! Mexico: San Luis Potosi; Penasco, 1876, J. G. Schaffner 571, OS-153520, Isosyntype (3). Syntype GH!

*Sigesbeckia bartmanii* Turner, Brittonia 30:66. 1978. Mexico: Sinaloa; Hwy 40, ca. 41 mi NE of Concordia, 10 Sep 1976, R. L. Hartman, V. A. Funk and F. Chiang C. 4303, OS-125440, Isotype (18). Holotype LL.

*Tithonia hondurensis* La Duke, Rhodora 84:139. 1982. Honduras: El Paraiso; E of El Paraiso-Morazan state border, 5 mi W of dirt road to Ojo de Agua on hwy from Dunli to Zamorano (Hwy 4), 4 Dec 1978, V. A. Funk and K. Landon 2938, OS-128429, Holotype (18).

*Trillium reliquum* Freeman, Brittonia 27:21. 1975. Georgia: Richmond Co.; east-facing bluff of Savannah River, ca. 5 mi above Augusta, 30 Mar 1968, J. D. Freeman, J. T. Murrell, M. Ihara and K. Ihara 625, OS-153500, Isotype (19). Holotype GH.

*Trillium bugeri* f. *flavum* Peattie, J. Elisha Mitchell Sci. Soc. 42:199. 1927. Tennessee: Knox Co.; Knoxville, Apr 1897, A. Ruth s.n., OS-153496, Isosyntype (21). Syntype NCU.

*Valerianella nuttallii* f. *compacta* D. M. Eggers, Syst. Bot. 8:42. 1983. Arkansas: Hot Springs Co.; Arkansas 7, ca. 2.2 mi SW of Garland Co. line, 11 May 1967, D. M. Eggers and D. Demaree 2066B, OS-154133, Isotype (19). Holotype US.

*Viguiera funkiae* Harriman and H. Robinson, Wrightia 7:229. 1983. Mexico: Puebla; 1 mi S of Asuncion de Chila, 22 Aug 1976, R. L. Hartman and V. A. Funk 4153, OS-125322, Isotype (18). Holotype US.

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#### LITERATURE CITED

- Cusick, A. W. and J. A. Snider 1982 Survey of the herbarium resources of Ohio. Columbus, Organization of Herbaria in Ohio. 43 p.
- Furlow, J. J. 1982 The herbarium. In R. L. Stuckey, (ed.), Featured institution—The Ohio State University. Assoc. Syst. Collections Newsletter 10: 15-16.
- Holmgren, P. K., W. Keuken, and E. K. Schofield 1981 Index herbariorum. Part I. The herbaria of the world, ed. 7. Utrecht, Bohn, Scheltema, and Holtema. 452 p.
- Lowden, R. M. 1970 William Ashbrook Kellerman's botanical expeditions to Guatemala (1905-1908). Taxon 19: 19-35.
- Stafleu, F. A., V. Demoulin, W. Greuter, P. Hiepko, I. A. Linczenski, R. McVaugh, R. D. Meikle, R. C. Rollins, R. Ross, J. M. Schopf, and E. G. Voss (eds.) 1978 International code of botanical nomenclature. Utrecht, Bohn, Scheltema, and Holtema. 457 p.
- Stuckey, R. L. and R. G. Hawk 1974 Itinerary and type collections of L. M. Underwood and A. D. Selby's 1901 plant collecting trip in west-central Colorado. Southw. Naturalist 18: 361-370.
- \_\_\_\_ and W. A. Wentz 1974 Vascular-plant type specimens in The Ohio State University Herbarium. Ohio Jour. Sci. 74: 20-35.
- Wentz, W. A. 1974 The herbarium and type specimens of Thomas Henry Kearney, Jr., from 1890-1901. Taxon 23: 357-363.