

ADDITIONS TO THE REVISED CATALOG OF OHIO
VASCULAR PLANTS. I.*

JOHN H. SCHAFFNER.

The publication of a new catalog of Ohio vascular plants† in the spring of 1932 has apparently stimulated collectors to more intensive activity and in consequence a very large number of specimens have been received for the State Herbarium. Only the most important additions are given in the list below and of these 41 are entirely new to the state catalog. Several records have also been obtained of species in the published list which were not represented by any specimen in the herbarium. Typographical errors appear in two distribution records in the new catalog and should be corrected as follows: 2160. *Aster novae-angliae* L., read—General and abundant; 1132. *Geum strictum* Ait., read—Northeastern part of state; etc., instead of Northwestern. New records are inserted in the proper places by means of decimal numbers.

SCHIZAEACEAE. Climbing-fern Family.

- 10.1. *Lygodium palmatum* (Bern.) Sw. Climbing-fern. Pine Forest, Carbon-dale, Athens Co. Elizabeth E. Inmann. Same locality, Floyd B. Chapman.
12. *Polypodium polypodioides* (L.) Hitch. Gray Polypody. Rocky Fork, Highland Co. Leslie L. Pontius and Floyd Bartley.
47. *Pteretis nodulosa* (Mx.) Nieuwl. American Ostrich-fern. Common along roadside, Windsor Twp., Ashtabula Co. L. E. Hicks.
60. *Equisetum silvaticum* L. Wood Horsetail. Nelson Twp., N. E. Portage Co. R. J. Campbell.
63. *Lycopodium porophilum* Lloyd & Und. Rock Club-moss. Phelps Run, Ashtabula Co. L. E. Hicks.
64. *Lycopodium inundatum* L. Bog Club-moss. Bottom of abandoned stone quarry. Braceville Twp., Trumbull Co. Almon N. Rood.
- 66.1. *Lycopodium tristachyum* Pursh. Slender Trailing Club-moss. On edge of very dry bank along Conneaut River near Conneaut, Ashtabula Co. L. E. Hicks.
68. *Selaginella rupestris* (L.) Spring. Rock Selaginella. Newell Ledge, Nelson Twp., Portage Co. Almon N. Rood, R. J. Webb, and E. W. Vickers.

BUTOMACEAE. Flowering-rush Family.

- 87.1. *Butomus umbellatus* L. Flowering-rush. Little Cedar Point, Jerusalem Twp., Lucas Co. From Europe. Louis W. Campbell.
93. *Potamogeton pulcher* Tuck. Spotted Pondweed. South of Cardinal Lake, Ashtabula Co. L. E. Hicks.
101. *Potamogeton perfoliatus* L. Claspingleaf Pondweed. On beach at Sweden and East Ashtabula, Ashtabula Co. L. E. Hicks.

*Papers from the Department of Botany, The Ohio State University, No. 319.

†SCHAFFNER, JOHN H. Revised Catalog of Ohio Vascular Plants. Ohio Biol. Surv. 5 (2): 87-215. 1932. (Bull. No. 25).

106. *Potamogeton vaseyi* Robb. Vasey's Pondweed. Small pond along Conneaut River near Farnham, Ashtabula Co. L. E. Hicks.
108. *Potamogeton dimorphus* Raf. Spiral Pondweed. In pond at McArthur, Vinton Co. L. E. Hicks.
- 112.1. *Najas quadalupensis* (Spreng.) Mor. Guadalupe Naias. Abundant in streams in Williamsfield Twp., Ashtabula Co. L. E. Hicks.
118. *Castalia tuteosa* (Paine) Greene. Tuberous Water-lily. Near East Tiberly, Summit Co., mouth of Conneaut River and pond along Ashtabula River., Ashtabula Co. L. E. Hicks.
122. *Sparganium androcladum* (Engelm.) Morong. Branching Bur-reed. Rock Run, Liberty Twp., Jackson Co. Leslie L. Pontius and Floyd Bartley.
- 138.1. *Wolffia papulifera* Thomp. Pointed Wolffia. In a small pool, Salt Creek, Liberty Twp., near Coal Twp., Jackson Co. Robert B. Gordon.
142. *Scirpus sylvaticus* L. Wood Bulrush. Swampy ground. Richland Co. E. Wilkinson.
- 145.1. *Scirpus heterochaetus* Chase. Pale Great Bulrush. In a swamp. Mantua Twp., Portage Co. Almon N. Rood.
149. *Scirpus debilis* Pursh. Weak Clubrush. Painesville, Lake Co. Wm. C. Werner.
152. *Eriophorum viridicarinatum* (Engelm.) Fern. Thin-leaf Cotton-sedge. Painesville, Lake Co. Wm. C. Werner.
160. *Eleocharis intermedia* (Muhl.) Schultes. Matted Spike-rush. Columbus, Franklin Co. Wm. C. Werner.
172. *Cyperus speciosus* Vahl. Michaux's Cyperus. Painesville, Lake Co. Wm. C. Werner.
187. *Mariscus mariscoides* (Muhl.) Ktz. Twig-rush. Cedar Swamp, Champaign Co. Wm. C. Werner. Mantua Twp., Portage Co., Almon N. Rood.
189. *Scleria triglomerata* Mx. Tall Nut-rush. Nettle Lake, Williams Co. Floyd Bartley and Leslie L. Pontius.
200. *Carex plana* Mack. Painesville, Lake Co. Wm. C. Werner.
212. *Carex prearea* Dew. Prairie Sedge. Painesville, Lake Co. Wm. C. Werner.
216. *Carex crus-corvi* Shuttlw. Raven-foot Sedge. Wood Co. Albert Neifer and Wm. C. Werner; Scioto Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
222. *Carex interior* Bail. Inland Sedge. Painesville, Lake Co. Wm. C. Werner.
223. *Carex sterilis* Willd. Barren Sedge. Cedar Swamp, Champaign Co. Wm. C. Werner.
- 230.1. *Carex projecta* Mack. Necklace Sedge. Painesville, Lake Co. Dr. H. C. Beardslee (1879). Sent in by Mr. Wm. C. Werner.
242. *Carex foena* Willd. Hay Sedge. Painesville, Lake Co. Wm. C. Werner.
249. *Carex gynandra* Schw. Nodding Sedge. Buchtel, Athens Co. Len. Stephenson.
303. *Carex atherodes* Spreng. Awned Sedge. "Onion Island," Buckeye Lake, Fairfield Co. Edward S. Thomas.
- 304.1. *Carex viridula* Mx. Green Sedge. (*C. oederi pumila* (C. & G.) Fern.) Cedar Swamp, Champaign Co. Wm. C. Werner.
305. *Carex cryptolepis* Mack. Small Yellow Sedge. Mantua Twp., Portage Co. Almon N. Rood and R. J. Webb.
306. *Carex flava* L. Yellow Sedge. Cedar Swamp, Champaign Co. Wm. C. Werner. "Urbana Bog," Champaign Co. E. Lucy Braun.
- 333.1. *Bromus altissimus* Pursh. Tall Brome-grass. Braceville Twp., Trumbull Co. Almon N. Rood. Painesville, Lake Co. Wm. C. Werner.
- 334.1. *Bromus asper* Murr. Rough Brome-grass. Daleyville, Pike Co. Leslie L. Pontius and Floyd Bartley.
- 410.1. *Alopecurus myosuroides* Huds. Slender Foxtail. Accidental. A number of clumps on Ohio State University Farm. Columbus, Franklin Co. C. J. Willard.
413. *Alopecurus aristatulus* Mx. Short-awned Foxtail. Near Columbus, Franklin Co., Wm. C. Werner; Cedar Swamp, Champaign Co., John H. Schaffner.

430. *Aristida purpurascens* Poir. Purplish Triple-awn-grass. Liberty Twp., Highland Co. Katie M. Roads.
508. *Paspalum setaceum* Mx. Slender Paspalum. Liberty Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
- 508.1. *Paspalum pubescens* Muhl. Pubescent Paspalum. Plentiful in fields near Painesville, Lake Co. Identified by A. S. Hitchcock. Wm. C. Werner.
517. *Miscanthus sinensis* Anderss. Chinese Plume-grass. A large well established patch along bank of railway. Brush Creek Twp., Scioto Co. Katie M. Roads; Longstreth, Hocking Co. Len. Stephenson.
547. *Aletris farinosa* L. Colic-root. Colerain Twp., Ross Co.; Jackson Twp., Vinton Co.; near Nettle Lake, Williams Co. Leslie L. Pontius and Floyd Bartley.
554. *Triantha glutinosa* (Mx.) Baker. Glutinous Triantha. Paxton Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
594. *Juncus balticus* Willd. Baltic Rush. Bay Point, Ottawa Co., and Conneaut, Ashtabula Co. L. E. Hicks.
- 599.1. *Juncus greenii* Oakes and Tuck. Green's Rush. Abundant in low, wet swale. Phalanx, Trumbull Co. Almon N. Rood.
614. *Xyris flexuosa* Muhl. Slender Yellow-eyed-grass. Wood Co. Albert Kneifer. Sent by Wm. C. Werner.
647. *Blephariglottis blephariglottis* (Willd.) Rydb. White Fringed-orchis. East Andover Twp., Ashtabula Co. L. E. Hicks.
656. *Ibidium strictum* (Rydb.) House. Hooded Lady's-tresses. Goodhope Twp., Hocking Co. Floyd B. Chapman.
659. *Ibidium beckii* (Lindl.) House. Little Lady's-tresses. Farnham, Ashtabula Co. L. E. Hicks. Buchtel, Athens Co. Len. Stephenson.
- 660.1. *Peranium tessellatum* (Lodd.) Heller. Loddiges' Rattlesnake-plantain. (*Epipactis tessellata* (Lodd.) A. A. Eat.). Along Phelps Run, Ashtabula Co. L. E. Hicks.
686. *Ranunculus bulbosus* L. Bulbous Buttercup. Ashtabula, Ashtabula Co. L. E. Hicks.
688. *Ranunculus repens* L. Creeping Buttercup. New Castle Twp., Coshocton Co. Frank B. Selby.
- 688a. *Ranunculus repens pleniflorus* Fern. Double-flowered Creeping Buttercup. Geneva, Ashtabula Co. L. E. Hicks.
694. *Ranunculus pusillus* Poir. Dwarf Crowfoot. East Monroe Twp., Ashtabula Co. L. E. Hicks.
701. *Nigella damascena* L. Love-in-a-mist. In a pasture lot. Hillsboro, Highland Co. Katie M. Roads.
- 705.1. *Delphinium cultorum* Voss. Candle Larkspur. Persistent in Conneaut, Ashtabula Co. L. E. Hicks.
707. *Delphinium exaltatum* Ait. Fall Larkspur. Persistent at Ashtabula, Ashtabula Co. L. E. Hicks.
721. *Actaea rubra* (Ait.) Willd. Red Baneberry. Springfield and Jerusalem Twps., Lucas Co. Louis W. Campbell; Wayne Twp., Ashtabula Co. L. E. Hicks. Clifton Gorge, Greene Co. Arthur R. Harper.
760. *Fumaria officinalis* L. Common Fumitory. Kingsville, Ashtabula Co. L. E. Hicks.
768. *Lunaria annua* L. Honesty. Green Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
- 791.1. *Sophia sophia* (L.) Britt. Herb-Sophia. In a pasture lot. Hillsboro, Highland Co. Katie M. Roads.
798. *Norta irio* (L.) Britt. Longleaf Hedge-mustard. Along railroad embankment, Marion Co. F. B. Chapman.
837. *Brassica napus* L. Rape. Hillsboro, Highland Co. Katie M. Roads.
850. *Geranium columbinum* L. Long-stalked Crane's-bill. Jackson Twp., Jackson Co. Leslie L. Pontius and Floyd Bartley.
853. *Geranium pusillum* L. Small-flowered Crane's-bill. Green Twp., Ross Co. Leslie L. Pontius and Floyd Bartley.
855. *Erodium cicutarium* (L.) L'Her. Stork's-bill. In a field of crimson clover, Hillsboro, Highland Co. Katie M. Roads.
862. *Oxalis acetosella* L. White Wood-sorrel. Pymatuning Swamp, Ashtabula Co. L. E. Hicks.

864. *Linum perenne* L. Perennial Flax. Persistent along river at Conneaut, Ashtabula Co. L. E. Hicks.
867. *Linum striatum* Walt. Ridged Flax. Jackson Twp., Jackson Co. Leslie L. Pontius and Floyd Bartley; Andover, Ashtabula Co. L. E. Hicks.
876. *Zanthoxylum americanum* Mill. Prickly-ash. Windsor Twp., Ashtabula Co. L. E. Hicks.
879. *Polygala pauciflora* Willd. Fringed Milkwort. Margin of white pine woods, Farnham, Ashtabula Co. L. E. Hicks.
887. *Phyllanthus carolinensis* Walt. Carolina Phyllanthus. Liberty Twp., Ross Co. Leslie L. Pontius and Floyd Bartley.
- 917.1. *Malva verticillata* L. Whorled Mallow. In a pasture lot in Hillsboro, Highland Co. Katie M. Roads.
947. *Hypericum canadense* L. Canadian St. John's-wort. Conneaut, Ashtabula Co. L. E. Hicks.
- 950.1. *Triadenum longifolium* Small. Long-leaf Marsh St. John's-wort. Liberty Twp., Jackson Co. Floyd Bartley and Leslie L. Pontius.
953. *Crocanthemum canadense* (L.) Britt. Canada Frostweed. Abundant on river banks in East Conneaut, Ashtabula Co. L. E. Hicks.
956. *Lechea racemulosa* Lam. Oblong-fruited Pinweed. One mile south of Portage, Wood Co., and near Conneaut, Ashtabula Co. L. E. Hicks.
960. *Lechea leggettii* Britt. & Holl. Leggett's Pinweed. Portage, Wood Co., Liberty Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
961. *Lechea intermedia* Legg. Large-podded Pinweed. Dry upland pasture. Hanover Twp., Ashland Co. R. B. Gordon.
972. *Viola tricolor* L. Garden Pansy. Escaped along river at Conneaut, Ashtabula Co. L. E. Hicks.
979. *Viola affinis* LeC. Thinleaf Blue Violet. Liberty Twp., Ross Co. Leslie L. Pontius and Floyd Bartley.
998. *Moehringia lateriflora* (L.) Fenzl. Bluntleaf Moehringia. Conneaut, Ashtabula Co. L. E. Hicks.
1000. *Alsine aquatica* (L.) Britt. Water Chickweed. Painesville, Lake Co. Wm. C. Werner. In small pond near Saybrook, Ashtabula Co. L. E. Hicks.
1002. *Alsine pubera* (Mx.) Britt. Great Chickweed. Near Geneva, Ashtabula Co. L. E. Hicks.
1006. *Cerastium viscosum* L. Mouse-ear Chickweed. Liberty Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1011. *Spergula arvensis* L. Corn Spurry. Four miles east of Barnesville, Belmont Co. Emma E. Laughlin and Edward Ransom. Growing along fence-row near Saybrook, Ashtabula Co. L. E. Hicks.
1028. *Silene wherryi* Small. Wherry's Catchfly. Bourneville, Ross Co. and in Adams Co. near Scioto Co. line. Katie M. Roads.
1037. *Dianthus prolifer* L. Proliferous Pink. Dry fields, Cleveland, Cuyahoga Co. L. D. Stair. Lost specimen recovered.
1039. *Limnia perfoliata* (Donn) Haw. Spanish-lettuce. Painesville, Lake Co. Wm. C. Werner.
1049. *Scleranthus annuus* L. Knawel. Near Beallsville, Monroe Co. Harry Briggs.
1063. *Chenopodium vulvaria* L. Fetid Goosefoot. Circleville, Pickaway Co. Leslie L. Pontius and Floyd Bartley; Napoleon, Henry Co. E. H. Bond.
- 1104.1. *Tiniaria cilinodis* (Mx.) Small. Fringed Black Bindweed. Conneaut River west of Farnham, Ashtabula Co. L. E. Hicks.
1132. *Geum strictum* Ait. Yellow avens. Nettle Lake, Williams Co. Leslie L. Pontius and Floyd Bartley.
- 1144.1. *Duchesnea indica* (Andr.) Focke. Indian Strawberry. Introduced from Eurasia. Growing on shaded banks near the lake shore east of Ashtabula, Ashtabula Co. L. E. Hicks; Circleville Twp., Pickaway Co. Leslie L. Pontius and Floyd Bartley.
1149. *Rubus phoenicolasius* Max. Wineberry. Common in a ravine along Lake Erie, near Amboy, Ashtabula Co. L. E. Hicks.
- 1149.1. *Rubus idaeus* L. Red Raspberry. From Europe. Escaped near Amboy, Ashtabula Co. L. E. Hicks.
1153. *Rubus laciniatus* Willd. Cutleaf Blackberry. Near mouth of Conneaut River, Ashtabula Co. L. E. Hicks.

- 1164.1. *Spiraea latifolia* (Ait.) Borkh. American Meadow-sweet. Near Painesville, Lake Co. Wm. C. Werner.
1167. *Spiraea prunifolia* Sieb. & Zucc. Bridal-wreath (*Spiraea*). Escaped near Colebrook, Ashtabula Co. L. E. Hicks.
- 1170.1. *Rosa wichuraiana* Crep. White Dorothy Perkins variety of this. Long persistent and spreading about the site of a former dwelling. South Windsor Twp., Ashtabula Co. Original from Japan. L. E. Hicks.
- 1175.1. *Rosa cinnamomea* L. Cinnamon Rose. A common escape. Windsor Twp., Ashtabula Co. L. E. Hicks.
1176. *Rosa rugosa* Thunb. Japanese Rose. Escaped on high beach dunes at Geneva-on-the-Lake, Ashtabula Co. L. E. Hicks.
1182. *Agrimonia striata* L. Striate Agrimony. East Monroe Twp., Ashtabula Co. L. E. Hicks.
1189. *Prunus pennsylvanica* L. f. Red Cherry. East Monroe Twp., Ashtabula Co. L. E. Hicks.
1214. *Crataegus brainerdi* Sarg. Brainerd's Hawthorn. Farmington Twp., Trumbull Co. Almon N. Rood.
1254. *Trifolium reflexum* L. Buffalo Clover. Ashtabula Twp., Ashtabula Co. L. E. Hicks.
- 1264.1. *Wisteria frutescens* (L.) Poir. American Wisteria. (*Kraunkhia frutescens* (L.) Greene.) Escaped and long persistent near former dwelling site near Phelps Run, Ashtabula Co. L. E. Hicks.
1285. *Meibomia arenicola* Vail. Sand Tick-trefoil. Perkins, Erie Co. E. L. Moseley.
1321. *Galactia volubilis* (L.) Britt. Downy Milk-pea. Liberty Twp., Jackson Co. Leslie L. Pontius and Floyd Bartley.
1322. *Phaseolus polystachyus* (L.) B. S. P. Wild Bean. Brush Creek Twp., Highland Co.; Colerain Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1352. *Rhamnus caroliniana* Walt. Carolina Buckthorn. Adams Co., two miles from Brown Co. line and about fifteen miles north of the Ohio River. Mrs. W. L. Hughes.
1353. *Rhamnus frangula* L. Black Buckthorn. Bucyrus, Crawford Co. Volunteer or accidental. J. H. Ulmer.
- 1359.1. *Vitis labruscana* Bail. Labruscan Vineyard Grape. A white berried cultivated variety frequently escaped and persistent at Hartsgrove, Ashtabula Co. L. E. Hicks. Seedlings from Concord Grape escaped and persistent in Columbus, Franklin Co. John H. Schaffner.
- 1436.1. *Corylus rostrata* Ait. Beaked Hazelnut. Along Grand River near Harpersfield, Ashtabula Co. L. E. Hicks.
- 1472a. *Salix interior wheeleri* Rowlee. Ashtabula Beach, Ashtabula Co. L. E. Hicks.
- 1490.1. *Ribes glandulosum* Grauer. Fetid Current. East Monroe Twp., Ashtabula Co. L. E. Hicks.
- 1501.1. *Epilobium hirsutum* L. Great Hairy Willow-herb. Swamp near Conneaut, Ashtabula Co. L. E. Hicks.
1509. *Kneiffia pratensis* Small. Meadow Sundrops. Near Geneva-on-the-Lake, Ashtabula Co. L. E. Hicks.
1513. *Kneiffia longipedicellata* Small. Long-pedicelled Sundrops. Liberty Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1523. *Myriophyllum heterophyllum* Mx. Variant-leaf Water-milfoil. Marsh at Geneva-on-the-Lake, Ashtabula Co. L. E. Hicks.
1529. *Citrullus citrullus* (L.) Karst. Watermelon. Spontaneous along East Conneaut Road, Ashtabula Co. L. E. Hicks.
1538. *Ledum groenlandicum* Oedr. Labrador-tea. East Andover Twp., Ashtabula Co. L. E. Hicks.
- 1539.1. *Azalea canescens* Mx. Hoary Azalea. "In a muck area now destroyed," near Painesville, Lake Co. Wm. C. Werner; Phelps Creek, Ashtabula Co. L. E. Hicks.
1543. *Epigaea repens* L. Trailing Arbutus. Laurel Hill, near White Cottage, Muskingum Co. Jeanette A. Reed.
1563. *Vaccinium canadense* Kahn. Canada Blueberry. East Andover Twp., Ashtabula Co. L. E. Hicks.

1564. *Chiogenes hispidula* (L.) T. & G. Creeping Snowberry. East Andover Twp., Ashtabula Co. L. E. Hicks.
- 1570.1. *Polemonium coeruleum* L. Jacobs-ladder. Long-persistent about the site of a former dwelling in Windsor Twp., Ashtabula Co. L. E. Hicks.
1577. *Phlox ovata* L. Mountain Phlox. Highland Co. Reported by Edgar T. Wherry. *Bartonia* 13: 27. 1931.
- 1577a. *Phlox ovata carolina* (L.) Wherry. Near Cincinnati, Hamilton Co. (Lea Herbarium, Acad. Nat. Sci. Philadelphia), collected in 1839. Adams Co. (E. Lucy Braun Herb.)
1650. *Asclepias variegata* L. White Milkweed. Georgesville, Franklin Co. Wm. C. Werner.
1661. *Datura metel* L. Entire-leaf Jinson-weed. Napoleon, Henry Co. E. H. Bond.
1710. *Aureolaria laevigata* (Raf.) Raf. Entire-leaf False Foxglove. Below Harpersfield, Ashtabula Co. L. E. Hicks.
1737. *Antirrhinum majus* L. Great Snapdragon. Escaped near Geneva, Ashtabula Co. L. E. Hicks.
1746. *Paulownia tomentosa* (Thunb.) Baill. Paulownia. Near Buena Vista in both Adams and Scioto Cos. L. E. Hicks.
1759. *Stomopsis cornuta* (Mx.) Raf. Horned Bladderwort. Cedar Swamp, Champaign Co., near Bowlusville. Wm. C. Werner.
- 1769.1. *Cynoglossum boreale* Fern. Northern Wild Comfrey. East Monroe Twp., Ashtabula Co. L. E. Hicks.
1774. *Lithospermum carolinense* (Walt.) Mack. Hairy Puccoon. East Conneaut Beach, Ashtabula Co. L. E. Hicks.
1780. *Myosotis micrantha* Pall. Small-flowered Forget-me-not. Near Painesville, Lake Co. Wm. C. Werner.
- 1781.1. *Anchusa officinalis* L. Alkanet. Introduced near Painesville, Lake Co. W. C. Werner.
- 1782.1. *Symphytum asperimum* Donn. Rough Comfrey. Introduced near Painesville, Lake Co. Wm. C. Werner.
1785. *Lycopsis arvensis* L. Small Bugloss. Escaped near Austinburg, Ashtabula Co. L. E. Hicks; Painesville, Lake Co. Wm. C. Werner.
1792. *Verbena hybrida* Voss. Common Garden Verbena. Escaped near Saybrook, Ashtabula Co. L. E. Hicks.
- 1796.1. *Ajuga reptans* L. Creeping Bugleweed. Spontaneous at Painesville, Lake Co. Wm. C. Werner.
1805. *Scutellaria pilosa* L. Hairy Skullcap. Benton Twp., Hocking Co. Floyd Bartley and Leslie L. Pontius.
1814. *Mentha citrata* Ehrh. Bergamot Mint. Buchtel, Athens Co. Len. Stephenson.
1831. *Koelia pycnanthemoides* (Leav.) Ktz. Southern Mountain-mint. Liberty Twp., Jackson Co. Floyd Bartley and Leslie L. Pontius.
1841. *Hedeoma hispida* Pursh. Rough Pennyroyal. Oak Openings, Lucas Co. Floyd Bartley and Leslie L. Pontius.
1872. *Salvia pitcheri* Torr. Wild Blue Sage. Persistent after cultivation. Hillsboro, Highland Co. Katie M. Roads.
1892. *Hydrocotyle umbellata* L. Umbellate Marsh-pennywort. Conneaut River, Ashtabula Co. L. E. Hicks.
1942. *Cynoxylon canadense* (L.) Dwarf Dogwood. Near Streetsboro, Portage Co. Leslie L. Pontius and Floyd Bartley; Painesville, Lake Co. Wm. C. Werner.
- 1954.1. *Diodia virginiana* L. Virginia Buttonweed. Along the Ohio River shore, Adams Co. Conrad Roth.
1955. *Galium verum* L. Yellow Bedstraw. Hillsboro, Highland Co. Katie M. Roads.
1956. *Galium boreale* L. Northern Bedstraw. E. Monroe Twp., Ashtabula Co. L. E. Hicks.
1985. *Triosteum aurantiacum* Bickn. Scarlet-fruited Horse-gentian. Buchtel, Athens Co. Len. Stephenson.
- 1991.1. *Lonicera coerulea* L. Blue Fly Honeysuckle. Pymatuning Swamp, Ashtabula Co. L. E. Hicks.
1994. *Lonicera sempervirens* L. Trumpet Honeysuckle. South of Oak Hill, Jackson Co. Floyd Bartley and Leslie L. Pontius.

- 2027.1. *Ambrosia bidentata* Mx. Lanceleaf Ragweed. Dean Forest, Lawrence Co. From the West. Floyd Bartley and Leslie L. Pontius.
- 2039a. *Rudbeckia laciniata hortiensis* Bail. Golden-glow. Escaped in East Pierpoint Twp., Ashtabula Co. L. E. Hicks.
2050. *Helianthus instabilis* Wats. Unstable Sunflower. Dorset, Ashtabula Co. L. E. Hicks.
2081. *Megalodonta beckii* (Torr.) Greene. Water-marigold. Conneaut Harbor, Ashtabula Co. L. E. Hicks.
2082. *Coreopsis lanceolata* L. Lanceleaf Tickseed. Hillsboro, Highland Co. Katie M. Roads; West Alexandria, Preble Co. L. E. Hicks.
2095. *Silphium terebinthinaceum pinnatifidum* (Ell.) Gr. Wayne Twp., Pickaway Co. Leslie L. Pontius and Floyd Bartley.
2101. *Tagetes erecta* L. Large Marigold. Escaped at Conneaut, Ashtabula Co. L. E. Hicks.
2117. *Chrysopsis grammifolia* (Mx.) Ell. Grass-leaf Golden-aster. Lynx Prairie, Adams Co. L. E. Hicks.
2136. *Solidago neglecta* T. & G. Swamp Goldenrod. Green Twp., Ross Co. Leslie L. Pontius and Floyd Bartley.
2146. *Sericocarpus limifolius* (L.) B. S. P. Narrowleaf Whitetop Aster. Liberty Twp., Jackson Co. Leslie L. Pontius and Floyd Bartley.
2156. *Aster drummondii* Lindl. Drummond's Aster. Georgesville, Franklin Co. Wm. C. Werner.
2157. *Aster undulatus* L. Wavy-leaf Aster. Buffalo Beat, near Buchtel, Athens Co. L. E. Hicks and E. S. Thomas.
2161. *Aster patens* Ait. Late Purple Aster. Georgesville, Franklin Co. Wm. C. Werner.
2170. *Aster multiflorus* Ait. Dense-flowered Aster. Painesville, Lake Co. Wm. C. Werner.
2172. *Aster salicifolius* Lam. Willow Aster. Painesville, Lake Co.; Columbus, Franklin Co. Wm. C. Werner.
- 2176.1. *Aster acuminatus* Mx. Whorled Aster. East Monroe Twp., Ashtabula Co. L. E. Hicks.
- 2177.1. *Aster subulatus* Mx. Annual Saltmarsh Aster. On sandy, saline soil near oil wells, old lake beach, five miles south of Bowling Green, Wood Co. E. L. Moseley.
2218. *Matricaria chamomilla* L. German Chamomile. Painesville, Lake Co. and Hanging Rock, Lawrence Co. Wm. C. Werner.
- 2229.1. *Senecio sylvaticus* L. Wood Groundsel. From Europe. Painesville, Lake Co. Wm. C. Werner.
2250. *Cirsium odoratum* (Muhl.) Britt. Fragrant Thistle. On sand ridge south east of Conneaut, Ashtabula Co. L. E. Hicks.
2255. *Centaurea jacea* L. Brown Star-thistle. N. E. corner Bazetta Twp., Trumbull Co. R. J. Campbell. On bank of Penn Line Bog, Ashtabula Co. L. E. Hicks; Columbus, Franklin Co. and Mentor, Lake Co. Wm. C. Werner.
2258. *Centaurea vochinensis* Bernh. Tyrol Star-thistle. South of Ashtabula, Ashtabula Co. L. E. Hicks.
2270. *Apargia autumnalis* (L.) Hoffm. Fall Hawkbit. Painesville, Lake Co. Wm. C. Werner.
2297. *Sonchus uliginosus* Bieb. Glandless Field Sow-thistle. South of Kenton, Hardin Co. Leslie L. Pontius and Floyd Bartley.

The Background of Science.

In an early chapter of this stimulating and fundamental discussion of physical science Sir James Jeans says, "It is frequently more difficult to frame a sensible question than to obtain an answer to a nonsensical one." The book is largely given over to the framing of sensible basic questions to be asked of nature, and to nature's replies to these questions. The discussion is necessarily technical, but it is made extremely readable by the wealth of clear analogies presented. The book is the last word on the basic framework of science.—L. H. S.

The New Background of Science, by Sir James Jeans. viii + 301 pp. New York, the MacMillan Co., 1933.