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## COUNTY RECORD VOUCHERS FOR VASCULAR PLANT SPECIES NEWLY RECORDED FOR MISSOURI SINCE 1963

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Research on the flora of Missouri and botanical explorations in the state during the past thirty years have resulted in the discovery of numerous new records of vascular plants not recorded in Steyermark's *Flora of Missouri* (1963). A recent update (Yatskievych and Turner, 1990) compiled information on these additions to the flora together into a comprehensive checklist, but a significant number of other new finds have been published since then (see below). New records for the Missouri flora continue to be discovered at the rate of ten to twelve taxa annually, and this rate shows no evidence of decline.

Corcoran and Weber (1991) recently summarized their efforts on behalf of the Missouri Native Plant Society (MONPS) to computerize the county-level distributions of all vascular plant taxa presently known to grow outside of cultivation in the state. During the past eleven years the distributional data from Steyermark's *Flora* have been supplemented with several thousand vouchered county records, which have been submitted largely by MONPS members and published in a series of columns in *Missouriensis* (for summary see Corcoran and Weber, 1991). However, with few exceptions (Raveill & Taylor, 1983, 1984), no previous attempt has been made to tabulate the county-level distributions for additions to the flora. The purpose of this paper is to present a tabulation of these records, based on a review of herbarium specimens, in a format that should allow easy incorporation into the Missouri Flora Atlas database. Plant collectors in Missouri may also benefit from the knowledge of which counties the newer plant records have been collected in.

### METHODS AND MATERIALS

A list of taxa recorded for Missouri since Steyermark (1963) was developed during library and herbarium research at the Flora of Missouri Project and has been continually updated. A map number was assigned to each taxon by aligning it with its closest relative in the existing flora (Weber and Corcoran, 1991). The first new record to be aligned with a given "Steyermark" taxon was designated with the map number of the related taxon, plus the suffix ".09". In a few cases, subsequent additions in the same species complex were designated ".19", ".29", etc.

An attempt was made to locate herbarium specimens to voucher the county-level distribution of each new record. In the interest of timeliness, some of

the records were verified through correspondence with curators at various herbaria. Herbarium records were tabulated using the format in the most recent *Missouri Botanical Record* (Weber and Corcoran, 1991). Herbarium abbreviations follow those in Holmgren et al. (1990), except for the following herbaria not included in that work: University of Missouri, Kansas City (UMKC), University of Missouri, Columbia, Integrated Pest Management Herbarium (UMO/IPM).

## RESULTS

We were unable to locate any vouchers to support thirteen of the taxa reported as occurring in Missouri by Yatskievych and Turner (1990) and the earlier references cited therein. In some cases, such as *Rapistrum rugosum*, these specimens exist, but have not been formally donated to an herbarium by their collectors. Most of the others probably exist in herbaria not inventoried during our study. Further research will be necessary to verify or eliminate these taxa as members of Missouri's flora. The taxa that could not be confirmed (followed by a suggested map number) are: *Aster lanceolatus* Willd. ssp. *hesperius* (A. Gray) Semple & Chmielewski (2200.40); *Carex diandra* Schrank (459.09); *Castanea pumila* (L.) Miller var. *pumila* (758.10); *Cicuta maculata* L. var. *bolanderi* (S. Watson) G. Mulligan (1654.10); *Cyperus luzulae* (L.) Retz. (387.09); *Populus deltoides* Bartram ex Marshall ssp. *monillifera* (Aiton) Eckenwalder (737.30); *Solidago bicolor* (2150.09); *Solidago rigida* L. ssp. *humilis* (Porter) Heard & Semple (2165.20); *Rapistrum rugosum* (L.) All. (1047.09); *Verbena urticifolia* L. var. *leiocarpa* Perry & Fern. (1840.20); *Viola affinis* Le Conte (1561.09); *Viola pratincola* E. Greene (1561.19).

In some cases, taxa listed by Yatskievych and Turner (1990) as new to Missouri represent the redetermination by specialists of plants included by Steyermark (1963) under a different name (the name in Steyermark corresponds to a valid taxon not occurring in Missouri). In cases where all Missouri material was misdetermined in a consistent fashion, no new map number is necessary. Table 1 lists the corrected names for such taxa and the Steyermark map number with which they correspond. Taxa in both tables 1 and 2 are listed alphabetically by family, with the pteridophytes, monocots, and dicots in that order. Reasons for excluding the taxa listed in Steyermark (1963) for these map numbers were given by Yatskievych and Turner (1990).

County records documenting the distributions of other taxa reported since 1963 are listed in table 2, along with suggested map numbers. The species listed in the *Supplement* that appeared in later printings of Steyermark's flora are also included, as these were not assigned maps or map numbers previously.

In some cases, the specimens cited and the counties of occurrence differ from those listed in the original published reports for these taxa. This may be because additional county records have been documented, or because we were unable to locate all of the original collections cited by some authors. In each case we have attempted to be as complete as possible in circumscribing the known range for every new addition to Missouri's flora published to date. Future collectors will undoubtedly expand our knowledge of the distributions of many of these plants in the state.

## DISCUSSION

The present tabulation represents an important step toward updating the distributional data on the flora of Missouri. However, much research is still necessary before a computerized atlas can hope to be reasonably precise and complete. One of the biggest potential problems in adding data on new records is the affect of these additions on the perceived ranges of existing species. In several cases, additions to the flora represent taxa segregated from previously recognized ones. For example, records representing both *Platanthera praeclara* and *Platanthera leucophaea* were included by Steyermark (1963) in his distributional data under *Habenaria leucophaea*. Similarly, many of the records ascribed to *Selaginella apoda* by Steyermark actually refer to the more recently described *Selaginella eclipses*. The existing taxa from which some of the taxa in table 2 have been segregated will require reexamination, and in some cases will have one or more counties deleted from their ranges.

## ACKNOWLEDGMENTS

We are indebted to the following botanists, who examined and verified records in their herbaria for this report: Nancy Hensold (F); Robin Kennedy (UMO); Paul Redfearn (SMS); Anton Reznicek (MICH). We also greatly appreciate the support that the members of MONPS have provided to the Flora of Missouri Project during its first half-decade of discovery.

## LITERATURE CITED

- Carter, R. and C. T. Bryson. 1991. A report of *Cyperus grayoides* and *Cyperus retroflexus* (Cyperaceae) new to Missouri and notes on other selected Missouri *Cyperus*. Sida 14: 475-481
- Corcoran, W. T. and W. R. Weber. 1991. The Missouri Flora Geographic Information System and a proposed atlas of vascular plant flora in Missouri. Missouriensis 12: 13-20.

- Ebinger, J. E. and W. E. McClain. 1991. Naturalized Amur maple (*Acer ginnala* Maxim.) in Illinois. *Nat. Areas J.* 11: 170-171.
- Holmgren, P. K., N. H. Holmgren, and L. C. Barnett, eds. 1990. *Index Herbariorum*, ed. 8. Part 1: *The Herbaria of the World*. New York Botanical Garden, New York. 693 pp.
- Ladd, D. 1990. Noteworthy collections. *Eupatorium maculatum* L. (Asteraceae). *Castanea* 55: 293-294.
- \_\_\_\_\_, G. Gremaud, and B. Heumann. 1991. New and noteworthy vascular plants. *Missouriensis* 12: 36-44.
- \_\_\_\_\_ and B. Schuette. 1990. *Ranunculus testicularis* a new, weedy buttercup for Missouri. *Missouriensis* 11: 36-39.
- Muehlenbach, V. 1979. Contributions to the synanthropic (adventive) flora of the railroads in St. Louis, Missouri, U.S.A. *Ann. Missouri Bot. Gard.* 66: 1-108.
- Raveill, J. and S. Taylor. 1983. What's new in Missouri? *Missouriensis* 5: 12-21.
- \_\_\_\_\_ and \_\_\_\_\_. 1984. What's new in Missouri? II. *Missouriensis* 5: 60-66.
- Sullivan, J. 1991. Another alien has landed: *Evax prolifera* in Missouri. *Missouriensis* 12: 1-3.
- Summers, B. and G. Yatskievych. 1990. *Aster macrophyllus* L. (Asteraceae), a new record for Missouri. *Missouriensis* 11: 31-35.
- The Nature Conservancy. 1991. *Discover Natural Missouri*. The Nature Conservancy (Missouri Chapter), St. Louis. 212 pp.
- Weber, W. R. and W. T. Corcoran. 1991. *Missouri Botanical Record* 14. *Missouriensis* 12: 21-29.
- Whitley, J. R., B. Bassett, J. G. Dillard, and R. A. Haefner. 1990. *Water Plants for Missouri Ponds*. Missouri Department of Conservation, Jefferson City. 151 pp.
- Yatskievych, G. and B. Summers. 1991. Studies in the flora of Missouri, III. *Missouriensis* 12: 4-11.

\_\_\_\_\_ and J. Turner. 1990. *Catalogue of the flora of Missouri*.  
 Monogr. Syst. Botany Missouri Bot. Gard. 37: i-xii, 1-345.

Table 1. New records representing replacements for taxa previously misdetermined in Steyermark (1963) and their corresponding map numbers. References validating these changes were cited in Yatskievych and Turner (1990).

TAXON (NEW DETERMINATION)	MAP
<i>Dryopteris celsa</i> (W. Palmer) Small	61
<i>Fimbristylis puberula</i> (Michaux) M. Vahl var. <i>puberula</i>	404
<i>Spiranthes ovalis</i> Lindley var. <i>erostellata</i> Catling	703
<i>Torilis arvensis</i> (Hudson) Link	1642
<i>Carduus nutans</i> L. ssp. <i>leiophyllus</i> (Petrovic) Stoy. & Stef.	2354
<i>Atriplex truncata</i> (Torrey) A. Gray	867
<i>Hypericum majus</i> (A. Gray) Rusby	1544
<i>Euphorbia cyathophora</i> Murray	1445
<i>Utricularia macrorhiza</i> Le Conte	2018
<i>Linum rigidum</i> Pursh var. <i>compactum</i> (Nelson) C. Rogers	1404
<i>Ammannia robusta</i> Heer & Regel	1581
<i>Oxalis florida</i> Salisb. ssp. <i>florida</i>	1410
<i>Rumex cristatus</i> DC.	813
<i>Tamarix parviflora</i> DC.	1551
<i>Kallstroemia parviflora</i> Norton	1419

Table 2. County records and map numbers for new additions to the Missouri flora since 1963. Where not indicated in a footnote, the literature source for each new report was cited by Yatskievych and Turner (1990). Footnotes follow the table.

TAXA	COUNTY	COLLECTOR	HERB	MAP NO
ADIANTACEAE				
<i>Pellaea glabella</i> Mett. ex Kuhn var. <i>missouriensis</i>	Carter	Gastony 83-41	IND	29.10
	Dent	Gastony 83-31	IND	
	Jefferson	Yatskievych & Gastony 90-14	MO	
	Pulaski	Gastony 82-27c	IND	
ASPLENIACEAE				
<i>Asplenium montanum</i> Willd.	Montgomery	Dunlap 24754	UMO	42.09
MARSILEACEAE				
<i>Pilularia americana</i> Braun	Barton	Dunlap s.n.	UMO	20.09
	Lincoln	Schuette 1817	MO	
OPHIOGLOSSACEAE				
<i>Ophioglossum crotalophoroides</i> Walter	Oregon	Thomas et al 38497	MO	17.09.
<i>Ophioglossum petiolatum</i> Hook.	Pemiscot	Thomas & Marx 34700	MO	16.09
EQUISETACEAE				
<i>Equisetum x ferrissii</i> Clute	Clark	Skinner 2143	MO	13.09
<i>Equisetum pratense</i> Ehrh.	Clark	Jacobs s.n.	MO	10.09
<i>Selaginella eclipes</i> Buck	Barry	Steyermark 22529	MO	5.09
	Butler	Yatskievych et al 91-235	MO	
	Carter	Steyermark 11449	MO	
	Crawford	Steyermark 19780	MO	
	Dent	Steyermark 19393	MO	
	Douglas	Wagner et al 74159	MO	
	Howell	Redfearn & Weber 32789	MO	
	Iron	Steyermark 19825	MO	
	Jefferson	Redfearn 20811	SMS	
	Laclede	Steyermark 13897	MO	
	McDonald	Bush s.n.	MO	
	Oregon	Steyermark 12103	MO	

TABLE 2 (CONTINUED)

	Osage	<i>Steyermark 27643</i>	MO	
	Ozark	<i>Steyermark 15588</i>	MO	
	Polk	<i>Steyermark 71392</i>	MO	
	Pulaski	<i>Steyermark 25281</i>	MO	
	Ripley	<i>Steyermark 14288</i>	MO	
	Ste. Gene- vieve	<i>Steyermark 21103</i>	MO	
	Shannon	<i>Yatskievych et al</i> <i>90-422</i>	MO	
	Taney	<i>Steyermark 66353</i>	MO	
	Texas	<i>Steyermark 14581</i>	MO	
	Washington	<i>Steyermark 21051</i>	MO	
CYPERACEAE				
<sup>1</sup> <i>Carex abscondita</i> Mackenzie	Ripley	<i>Yatskievych et al</i> <i>89-131</i>	MO	496.09
<i>Carex atlantica</i> L. Bailey <i>ssp. atlantica</i>	Shannon	<i>Orzell 261B</i>	MO	465.09
	Stoddard	<i>Steyermark 78281</i>	MO	
	Wayne	<i>Orzell 927</i>	MO	
<i>Carex bicknellii</i> Britton <i>var. opaca</i> F. J. Herm.	Barton	<i>Castaner 5273</i>	WARM	478.10
	Ripley	<i>Yatskievych et al</i> <i>89-131</i>	MO	
	Stoddard	<i>Yatskievych et al</i> <i>89-120</i>	MO	
<i>Carex bromoides</i> Schk. ex Willd.	Bollinger	<i>Christ s.n.</i>	MO	465.29
	Butler	<i>Summers 426</i>	MO	
	Wayne	<i>Orzell 1010</i>	MO	
<i>Carex crawfordii</i> Fern.	St. Louis	<i>Muehlenbach 3751</i>	MO	467.09
<i>Carex eleocharis</i> L. Bailey	St. Louis	<i>Muehlenbach 1951</i>	MO	443.09
<i>Carex platyphylla</i> J. Carey	Howard	<i>Smith 82</i>	US	496.19
<i>Carex socialis</i> Mohl.	Pemiscot	<i>Steyermark 5115</i> & <i>Schwegman</i>	MO	448.09
	Mississippi	<i>Yatskievych 92-114</i>	MO	
<i>Carex sterilis</i> Willd.	Dent	<i>Orzell 982</i>	MICH	465.19
	St. Francois	<i>Orzell 263</i>	MICH	
	Shannon	<i>Orzell 262</i>	MICH	
<i>Carex sychnocephala</i> J. Carey	Platte	<i>Castaner 10089</i>	MO	466.09
<i>Cyperus flavicomus</i> Michaux	Stoddard		UMO	364.09
<sup>2</sup> <i>Cyperus grayioides</i> Mohl.	Mississippi	<i>Bryson 10472</i>	MO	384.09
	New Madrid	<i>Carter 8263</i>	MO	
	Scott	<i>Bryson 10478</i>	MO	
<i>Cyperus retroflexus</i> Buckley	Mississippi	<i>Bryson 10473</i>	MO	382.09
<i>Eleocharis atropurpurea</i> (Retz.) Kunth	Platte	<i>Castaner 7260</i>	WARM	396.09
<i>Fimbristylis miliacea</i> (L.) M. Vahl	Stoddard	<i>Taylor s.n.</i>	UMO	407.07
<i>Fuirena simplex</i> M. Vahl <i>var. aristulata</i> (Torrey) Kral	Holt	<i>Steyermark 15094</i>	MO	427.10
	Jackson	<i>Bush 223</i>	MO	
<i>Scirpus deltarum</i> Schuyler	Holt	<i>Steyermark 15116</i>	MO	413.09



TABLE 2 (CONTINUED)

<i>Scirpus pedicellatus</i> Fern.	Howard	<i>Steyermark 14781</i>	MO	
	Adair	<i>Palmer &amp; Steyer- mark 41144</i>	MO	425.09
	Mason Putnam	<i>Steyermark 40585 Palmer &amp; Steyermark 41071</i>	WIS MO	
<i>Scirpus saximontanus</i> Fern.	Platte	<i>Castaner 7259</i>	WARM	410.09
DIOSCORIACEAE				
<i>Dioscorea batatas</i> Decne.	Howell	<i>Summers 3515</i>	MO	658.09
	Reynolds	<i>Nelson s.n.</i>	MODNR	
	Wayne	<i>Yatskievych et al. 89-170</i>	MO	
HYDROCHARITACEAE				
<sup>3</sup> <i>Egeria densa</i> Planchon	Oregon	<i>Redfearn 26628</i>	SMS	101.09
IRIDACEAE				
<i>Iris orientalis</i> Miller	Platte	<i>Henderson 67-687</i>	UMKC	668.09
JUNCACEAE				
<i>Juncus gerardii</i> Loisel	St. Louis	<i>Muehlenbach 2356</i>	MO	590.09
LEMNACEAE				
<i>Lemna aequinoctialis</i> Welw.	Dent	<i>Palmer &amp; Steyermark 41419</i>	MO	561.09
	Dunklin	<i>Trelease s.n.</i>	MO	
	Howell	<i>Steyermark 5222</i>	MO	
	Jackson	<i>Bush s.n.</i>	MO	
	Jasper	<i>Palmer 2200</i>	MO	
	Ozark	<i>Kellogg s.n.</i>	MO	
	Ripley	<i>Yatskievych et al. 89-127</i>	MO	
	St. Charles	<i>Sarger s.n.</i>	MO	
	St. Louis	<i>Thompson s.n.</i>	MO	
	Wayne	<i>Steyermark 6587</i>	MO	
<i>Lemna obscura</i> (Austin) Daubs	Dunklin	<i>Bush s.n.</i>	MO	558.09
	St. Louis	<i>Thompson s.n.</i>	MO	
<i>Lemna turionifera</i> Landolt	Scott	<i>Eggert s.n.</i>	MO	
	Clark	<i>Steyermark 28744</i>	F	560.09
	Jackson	<i>Bush 156</i>	MO	

TABLE 2 (CONTINUED)

LILIACEAE				
<i>Allium burdickii</i> (Hanes) A. G. Jones	DeKalb	Steyermark 69532	MO	616.09
	Dent	Chandler 5070	MO	
	Jefferson	Turner s.n.	MO	
	Mercer	Palmer &	MO	
		Steyermark 41325		
<i>Convallaria majalis</i> L.	Jackson	Henderson 65-112	MO	642.09
<i>Erythronium rostratum</i> W. Wolf	Madison	Summers 3155	MO	629.09
<i>Narcissus x medioluteus</i> Miller	St. Louis	Muehlenbach 3503	MO	660.09
NAJADACEAE				
<sup>3</sup> <i>Najas flexilis</i> All.	Butler	Summers 5137	MO	13.09
	Wayne	Summers 5318	MO	
ORCHIDACEAE				
<i>Platanthera praeclara</i> Sheviak & Bowles	Atchison	Summers 1531	MO	690.09
	<i>Spiranthes magnicamporum</i> Sheviak	Camden	Summers 1571	MO
Christian		Summers 1579	MO	
Franklin		Shea 291	MO	
Howell		Summers 935	MO	
Jefferson		Summers 1500	MO	
Miller		M. Wallace s.n.	MO	
Montgomery		Schuette 1637	MO	
Ozark		Yatskievych 88-252	MO	
St. Francois		Summers 638	MO	
Shannon		Summers et al. 3913	MO	
Stone		Summers 975	MO	
Taney		Redfearn & & Wu 33219	MO	
Texas		Summers & Ryan 3786	MO	
Webster		Summers 3111	MO	
Wright		Summers & Ryan 3868	MO	
<i>Tipularia discolor</i> (Pursh) Nutt.	Butler	Summers & Pelton s.n.	MO	712.09
	Oregon	Summers 2854	MO	
	Stoddard	Summers 3056	MO	

TABLE 2 (CONTINUED)

## POACEAE

<i>Agropyron desertorum</i> (Fisher ex Link) Schultes	Franklin	<i>Davit s.n.</i>	MO	176.09
	St. Louis	<i>Muehlenbach 2471</i>	MO	
<i>Aira caryophylla</i> L.	Greene	<i>Toney s.n.</i>	UMO	268.09
	Howell	<i>Summers 2696</i>	MO	
	Taney	<i>Castaner 1085</i>	WARM	
	Wayne	<i>Freckmann 12497</i>	UWSP	
<i>Bothriochloa bladhii</i> (Retz.) S. T. Blake	Howell	<i>Bennett 901</i>	UMO	357.09
<i>Bromus arvensis</i> L.	St. Louis	<i>Muehlenbach 4172</i>	MO	111.19
<i>Bromus commutatus</i> Schrader	Barton	<i>G. &amp; K. Yatskievych 88-34</i>	MO	111.09
	Benton	<i>Steyermark 5777</i>	MO	
	Jackson	<i>Bush s.n.</i>	MO	
	Jasper	<i>Palmer 3781</i>	MO	
	Marion	<i>Davis 8839</i>	MO	
	Monroe	<i>Hinterthuer 173A</i>	MO	
	St. Clair	<i>Castaner 5789</i>	MO	
	St. Louis	<i>Muehlenbach 3269</i>	MO	
<i>Chasmanthium laxum</i> (L.) Yates ssp. <i>sessiliflorum</i> (Poiret) L. Clark	St. Louis	<i>Kellogg s.n.</i>	MO	163.10
<i>Cynosurus echinatus</i> L.	St. Louis	<i>Muehlenbach 1628</i>	MO	193.09
<i>Dichanthelium sabulorum</i> (Lam.) Gould & C. A. Clark var. <i>thinium</i> (A. Hitchc. & Chase) Gould & C. A. Clark	Reynolds	<i>Nelson s.n.</i>	MO-DNR	308.09
<i>Echinochloa utilis</i> Ohwi & Yab.	St. Louis	<i>Muehlenbach 3349</i>	MO	337.01
<i>Elymus elongatus</i> (Host) Rumem.	St. Louis	<i>Muehlenbach 2756</i>	MO	174.09
<i>Eragrostis barrelieri</i> Daveau	St. Louis	<i>Muehlenbach 2732</i>	MO	149.09
<i>Eragrostis curtipedicellata</i> Buckley	St. Louis	<i>Muehlenbach 1993</i>	MO	155.09
<i>Eragrostis elliottii</i> S. Watson	St. Louis	<i>Muehlenbach 3183</i>	MO	154.09
<i>Eragrostis multicaulis</i> Steudel	St. Louis	<i>Muehlenbach 3723</i>	MO	147.09
<i>Eragrostis secundiflora</i> C. Presl ssp. <i>oxylepis</i> (Torrey) S. Koch	St. Louis	<i>Muehlenbach 1931</i>	MO	155.19
<i>Eriochloa villosa</i> (Thumb.) Kunth	Audrain	<i>Bullard s.n.</i>	UMO	283.09
	St. Francois	<i>G. &amp; K. Yatskievych 88-213</i>	MO	
<i>Leptochloa dubia</i> (Kunth) Nees	St. Louis	<i>Muehlenbach 2407</i>	MO	255.09
<i>Lolium persicum</i> Boiss. & Hohen.	St. Louis	<i>Muehlenbach 1176</i>	MO	193.09
<i>Lolium rigidum</i> Gaudin	St. Louis	<i>Muehlenbach 1411</i>	MO	193.19
<sup>4</sup> <i>Microstegium vimineum</i> (Trin.) A. Camus	Oregon	<i>Summers &amp; Dodd 3920</i>	MO	347.29
<i>Miscanthus sacchariflorus</i> (Maxim.) Hackel	Johnson	<i>Delozier 1315</i>	MO	347.09
<i>Miscanthus sinensis</i> Andersson	Warren	<i>Steyermark &amp; Branson 132195</i>	MO	347.19

TABLE 2 (CONTINUED)

<i>Paspalum urvillei</i> Steudel	St. Louis	<i>Muehlenbach 3070</i>	MO	293.09
<i>Pennisetum ciliare</i> (L.) Link	St. Louis	<i>Muehlenbach 1627</i>	MO	346.09
<i>Poa interior</i> Rydb.	Cass	<i>Smith 2429</i>	MO	140.09
<i>Sacciolepis striata</i> (L.) Nash	Oregon	<i>Yatskievych &amp; Summers 90-404</i>	MO	336.09
<i>Sclerochloa dura</i> (L.) P. Beauv.	Barry	<i>Ladd 6346</i>	MO-	164.09
			DNR	
	Dallas	<i>Ladd 4836</i>	MO-	
			DNR	
	Laclede	<i>Ladd 6239</i>	MOR	
	St. Louis	<i>Ladd 13935</i>	MO	
<i>Setaria viridis</i> (L.) P. Veauv. var. <i>major</i> (Gaudin) Posp.	St. Louis	<i>G. &amp; K. Yatskievych 90-272</i>	MO	343.10
<i>Stenotaphrum secundatum</i> (Walter) Kunze	Stone	<i>Ellis s.n.</i>	MO	323.09
<i>Vulpia bromoides</i> (L.) Gray	Jaspe	<i>Christ 19-3-3A</i>	MO	117.09

## PONTEDERIACEAE

<i>Heteranthera multiflora</i> (Griseb.) C. Horn	Bates	<i>Steyermark 21282</i>	MO	582.09
	Boone	<i>Christian s.n.</i>	UMO	
	Christian	<i>Palmer 64386</i>	UMO	
	Clay	<i>Mackenzie s.n.</i>	MO	
	Greene	<i>Standley 9066</i>	US	
	Holt	<i>Demetrio s.n.</i>	MO	
	Jackson	<i>Bush 443</i>	MO	
	Laclede	<i>Moore s.n.</i>	F	
	Lincoln	<i>Kellogg 823</i>	MO	
	Livingston	<i>Bush 9418</i>	F	
	Newton	<i>Palmer 53019</i>	UMO	
	St. Charles	<i>Kellogg s.n.</i>	MO	
	<i>Heteranthera rotundifolia</i> (Kunth) Griseb.	Barry	<i>Steyermark 65114</i>	MO
Buchanan		<i>Steyermark 70105</i>	F	
Christian		<i>Palmer 58238</i>	UMO	
Greene		<i>Blankenship s.n.</i>	MO	
Holt		<i>Demetrio 3</i>	F	
Howell		<i>Steyermark 23581</i>	MO	
Jackson		<i>Bush 845</i>	MO	
Jasper		<i>Palmer 2623</i>	MO	
Laclede		<i>Steyermark 64723</i>	F	
Lawrence		<i>Palmer 51319</i>	F	
McDonald		<i>Bush s.n.</i>	MO	
Montineau		<i>Steyermark 76609</i>	MO	
New Madrid		<i>Coll s.n.</i>	UMO	
Newton		<i>Palmer 63278</i>	UMO	
Oregon	<i>Steyermark 78901</i>	UMO		
Pemiscot	<i>Steyermark 26707</i>	F		
Polk	<i>Palmer 66926</i>	UMO		
Stone	<i>Steyermark 22705</i>	MO		

TABLE 2 (CONTINUED)

	Taney	Steyermark 22787	MO	
SMILACACEAE				
<i>Smilax illinoensis</i> Mangaly	Franklin	McBride et al. 46	MO	652.09
	Jefferson	Steyermark 1066	MO	
	Pike	Steyermark 28611	F	
	Schuyler	Steyermark 69915	F	
ACERACEAE				
<sup>5</sup> <i>Acer ginnala</i> Maxim.	Lincoln	Ebinger 25164	MO	1484.09
AMARANTHACEAE				
<i>Amaranthus tricolor</i> L.	St. Louis	Muehlenbach 3449	MO	883.09
ANACARDIACEAE				
<i>Toxicodendron radicans</i> (L.) Kuntze ssp. <i>pubens</i> (Engelm. ex S. Watson) Gillis	Carter	Gillis 3795	MSC	1472.20
	Henry	Hitchcock s.n.	MO	
	Iron	Smith 441	F	
	Jackson	Bush s.n.	MO	
APIACEAE				
<i>Berula erecta</i> (Hudson) Cov. var. <i>incisum</i> (Torrey) Cronq.	Lafayette	Gremaud s.n.	MO	661.09
	Saline	Kramer s.n.	MO	
<i>Tropocarpus aethusae</i> Nutt. ex DC.	Mississippi	Summers 4946	MO	1639.09
ASCLEPIADACEAE				
<i>Asclepias subverticillata</i> (A. Gray) Vail	St. Louis	Muehlenbach 2000	MO	1763.09
ASTERACEAE				
<i>Artemisia absinthium</i> L.	St. Louis	Muehlenbach 1706	MO	2341.09
<sup>6</sup> <i>Aster macrophyllus</i> L.	Howell	Summers 3305	MO	2176.09
	Shannon	Summers 3110	MO	
	Texas	Summers 1480	MO	
	Lafayette	Gremaud et al. s.n.	MO	2202.09
<i>Aster pubentior</i> Cronq.	Lafayette	Gremaud et al. s.n.	MO	2202.09
<i>Bidens alba</i> (L.) DC. var. <i>radiata</i> (Schultz-Bip) Ballard	St. Louis	Muehlenbach 3046	MO	2299.09
	St. Louis	Muehlenbach 3706	MO	2304.09

TABLE 2 (CONTINUED)

<i>Boltonia diffusa</i> Elliott var. <i>diffusa</i>	St. Louis	<i>Letterman s.n.</i>	NY	2174.10
<i>Centaurea diffusa</i> Lam.	Howard	<i>Slater 1667</i>	UMO/ IPM	2371.09
	St. Louis	<i>Muehlenbach 1659</i>	MO	
<i>Centaurea diluta</i> Dryander	St. Louis	<i>Muehlenbach 3299</i>	MO	2365.19
<i>Cirsium texanum</i> Buckley var. <i>texanum</i>	St. Louis	<i>Muehlenbach 2663</i>	MO	2359.09
<i>Cosmos parviflorus</i> (Jacq.) Pers.	St. Louis	<i>Muehlenbach 2285</i>	MO	2308.09
<i>Crepis tectorum</i> L.	St. Louis	<i>Muehlenbach 1802</i>	MO	2399.09
<i>Echinacea simulata</i> McGregor	Butler	<i>McGregor 17154</i>	KANU	2262.09
	Camden	<i>Brooks 19798</i>	MO	
	Cape Girardeau	<i>Palmer 18016</i>	MO	
	Carter	<i>McGregor 17183</i>	KANU	
	Crawford	<i>McGregor 15636</i>	KANU	
	Dent	<i>McGregor 15635</i>	KANU	
	Dunklin	<i>Bauer 11450</i>	F	
	Franklin	<i>Greenman 4121</i>	MO	
	Iron	<i>Palmer 18088</i>	MO	
	Jefferson	<i>Eggert s.n.</i>	MO	
	Oregon	<i>Harms 321</i>	KANU	
	Phelps	<i>Steyermark 25337</i>	MO	
	Reynolds	<i>McGregor 17192</i>	KANU	
	St. Francois	<i>Steyermark 28797</i>	F	
	St. Louis	<i>Churchill 4120</i>	MO	
	Shannon	<i>Harms 322</i>	KANU	
	Texas	<i>Harms 325</i>	KANU	
	Washington	<i>Dewart s.n.</i>	MO	
<i>Eupatorium capillifolium</i> (Lam.) Small	St. Louis	<i>Muehlenbach 3812</i>	MO	2122.09
<sup>7</sup> <i>Eupatorium maculatum</i> L.	Lafayette	<i>Ladd 13302</i>	MOR	2118.09
<sup>8</sup> <i>Evax prolifera</i> Nutt. ex DC.	Ozark	<i>Webster Groves Nature Study Society s.n.</i>	MO	2218.09
<i>Gutierrezia texana</i> (DC.) Torrey & A. Gray	St. Louis	<i>Muehlenbach 1715</i>	MO	2142.09
<i>Helianthus rigidus</i> (Cass.) Desf. ssp. <i>subrhomboideus</i> (Rydb.) Heiser, D. M. Smith, Clev., & W. Martin	St. Louis	<i>Muehlenbach 2745</i>	MO	2273.20
<i>Heliopsis helianthoides</i> (L.) Sweet var. <i>helianthoides</i>	St. Louis	<i>Sherff s.n.</i>	MO	2250.20
<i>Iva annua</i> L. var. <i>caudata</i> (Small) R. Pike	Marion	<i>Davis 6287</i>	MO	2220.20
	Jackson	<i>Woodson 877</i>	MO	
	St. Louis	<i>Glatfelter s. n.</i>	MO	
<i>Lactuca sativa</i> L.	St. Louis	<i>Muehlenbach 4002</i>	MO	2389.09

TABLE 2 (CONTINUED)

<i>Liatrix scariosa</i> (L.) Willd.	Barry	<i>Bush 3189</i>	MO	2133.09
var. <i>nieuwlandii</i> Lunell	Iron	<i>Russell s.n.</i>	MO	
	Oregon	<i>Summers 2838</i>	MO	
	Pike	<i>Davis 6172</i>	MO	
	St. Louis	<i>Hersford s.n.</i>	MO	
	Stone	<i>Robertson 318</i>	MO	
<i>Picris echioides</i> L.	St. Louis	<i>Muehlenbach 3300</i>	MO	2380.09
<i>Picris hieracioides</i> L.	St. Louis	<i>Muehlenbach 3377</i>	MO	2380.19
ssp. <i>hieracioides</i>				
<i>Ratibida tagetes</i> (E. James)	St. Louis	<i>Muehlenbach 2029</i>	MO	2266.09
Barnhart				
<i>Senecio ampullaceus</i> Hook.	St. Louis	<i>Muehlenbach 1735</i>	MO	2347.09
<i>Senecio tomentosus</i> Michaux	Barry	<i>Bush 276</i>	MO	2348.09
<i>Solidago rigida</i> L. ssp.	Jefferson	<i>Steyermark 4457</i>	MO	2165.10
<i>glabrata</i> (E. Braun) Heard & Semple	Ozark	<i>Yatskievych 88-253</i>	MO	
<i>Tagetes patula</i> L.	St. Louis	<i>Muehlenbach 1461</i>	MO	2322.09
<i>Verbesina encelioides</i> (Cav.) Benth. & Hook. f.	Dunklin	<i>Steyermark 83410</i>	MO	2288.10
ssp. <i>encelioides</i>	Jackson	<i>Bush 9392</i>	MO	
	St. Louis	<i>Eisendrath s.n.</i>	MO	
<i>Vernonia xillinoensis</i> Gleason	Boone	<i>Jeffrey 186</i>	MO	2113.09
	Chariton	<i>Steyermark 26453</i>	MO	
	Gasconade	<i>Steyermark 8253</i>	MO	
	Iron	<i>Steyermark 12863</i>	MO	
	Jackson	<i>Bush 11508</i>	MO	
	Johnson	<i>Steyermark 24659</i>	MO	
	Lewis	<i>Shoop 1142</i>	MO	
	Lincoln	<i>Steyermark 8959</i>	MO	
	Marion	<i>Davis 9760</i>	MO	
	Randolph	<i>Steyermark 16026</i>	MO	
	St. Charles	<i>Steyermark 9252</i>	MO	
	St. Francois	<i>Shoop 1161</i>	MO	
	St. Louis	<i>Greenman 4009</i>	MO	
	Scotland	<i>Shoop 1140</i>	MO	
	Scott	<i>Eggert s.n.</i>	MO	
	Shannon	<i>Steyermark 12695</i>	MO	
	Washington	<i>anonymous s.n.</i>	MO	
<i>Vernonia x peralta</i> Daniels	Boone	<i>Daniels s.n.</i>	UMO	2113.19

## BORAGINACEAE

<i>Brunnera macrophylla</i> (Adams) I. M. Johnston	Boone	<i>Allison 21</i>	UMO	1830.09
<i>Heliotropium curassavicum</i> L. var. <i>curassavicum</i>	Cooper	<i>Jagger s.n.</i>	MO	1816.09
<i>Myosotis stricta</i> Link ex Roemer & Schultes	St. Louis	<i>Christ s.n.</i>	MO	1831.09

TABLE 2 (CONTINUED)

BRASSICACEAE				
<i>Alliaria petiolata</i> (M. Bieb.) Cavara & Grande	Holt	McGregor 36900	MO	1101.09
	Jackson	Henderson 67-333	UMKC	
	Linn	Schuette 1978	MO	
	St. Louis	Boufford 18953	MO	
	Taney	Scott 3251	SOTO	
<i>Alyssum alyssoides</i> (L.) L.	Cass	Henderson 66-361	MO	1061.09
	Holt	Henderson 67-726	UMKC	
<i>Alyssum desertorum</i> Stapf	Pettis	Miller 77	WARM	1061.19
<i>Arabis glabra</i> (L.) Bernh.	St. Louis	Lodewyks s.n.	MO	1080.09
<i>Aubrieta deltoidea</i> (L.) DC.	Boone	Allison 15	UMO	1066.09
<i>Brassica napus</i> L. var. <i>napus</i>	St. Louis	Muehlenbach 100	MO	1042.09
<i>Brassica oleracea</i> L.	St. Louis	Muehlenbach 2088	MO	1042.19
<i>Cardamine diphylla</i> (Michaux) Alph. Wood	Chariton	Young s.n.	CM	1076.09
	Clinton	Henderson 66-291	MO	1054.10
<i>Cardaria draba</i> (L.) Desv.	Jackson	Henderson 75-01	MO	1051.09
ssp. <i>chalepensis</i> (L.) O. Sculz	Jackson	Bush s.n.	MO	1061.29
<i>Lepidium latifolium</i> L.	St. Louis	Muehlenbach 3450	MO	
<i>Lobularia maritima</i> (L.) Desv.	St. Louis	Engelmann s.n.	MO	1089.09
	Jackson	Bush s.n.	MO	1089.19
<i>Rorippa tenerrima</i> E. Greene	St. Charles	Eggert s.n.	MO	
<i>Rorippa truncata</i> (Jepson) Stuckey	St. Louis	Eggert s.n.	MO	
CACTACEAE				
<i>Opuntia polyacantha</i> Haw. var. <i>polyacantha</i>	Jasper	Palmer s.n.	US	1575.09
CANNABACEAE				
<i>Humulus lupulus</i> L. var. <i>pubescens</i> E. Small	Andrew	Steyermark 15154	MO	792.10
	Barry	Trelease 1196	MO	
	Cape Girar- ardeau	Kellogg s.n.	MO	
	Harrison	Steyermark 76553	MO	
	Jackson	Bush 6956	MO	
	Jasper	Palmer 1258	MO	
	Jefferson	Eggert s.n.	MO	
	Marion	Davis 3092	MO	
	Ralls	Davis 3713	MO	
	St. Francois	Bush s.n.	MO	
	St. Louis	Engelmann s.n.	MO	



TABLE 2 (CONTINUED)

CAPRIFOLIACEAE				
<i>Lonicera maackii</i> (Rupr.) Maxim.	Franklin	<i>Croat 3902</i>	MO	2063.09
	St. Louis	<i>Muehlenbach 3985</i>	MO	
<i>Lonicera xylosteum</i> L.	Jasper	<i>Palmer 69188</i>	MO	2063.19
	St. Louis	<i>Summers 2748</i>	MO	
<i>Sambucus canadensis</i> L.	Hickory	<i>Castaner 4219</i>	MO	2081.30
var. <i>laciniata</i> A. Gray				
<i>Symphoricarpos albus</i> (L.) S. F. Blake	St. Louis	<i>Muehlenbach 3485</i>	MO	2070.09
<i>Triosteum angustifolium</i> L. var. <i>angustifolium</i> f. <i>rubrum</i> F. Lane	Phelps	<i>Kellogg 23</i>	US	2073.20
CAROPHYLLACEAE				
<i>Cerastium pumilum</i> Curtis ssp. <i>pumilum</i> f. <i>medium</i> Moeschl	St. Louis	<i>Muehlenbach 3231</i>	MO	924.09
<i>Cerastium semidecandrum</i> L.	St. Louis	<i>Muehlenbach 3520</i>	MO	924.19
<i>Dianthus plumarius</i> L.	Camden	<i>McReynolds</i> <i>750713</i>	LSU	947.09
<i>Lychnis coronaria</i> (L.) Desr.	St. Louis	<i>Solomon s.n.</i>	MO	933.09
	Stone	<i>Kastler s.n.</i>	UMO	
<i>Myosoton aquaticum</i> (L.) Moench	Clay	<i>Raveill 2319</i>	MO	918.09
<i>Sagina procumbens</i> L.	Ripley	<i>Yatskievych et</i> <i>al. 89-136</i>	MO	913.09
<i>Silene armeria</i> L.	St. Louis	<i>Muehlenbach 3451</i>	MO	934.09
CELASTRACEAE				
<i>Euonymus fortunei</i> (Turcz.) Hand.-Mazz.	St. Louis	<i>Muehlenbach 3142</i>	MO	1479.09
CHENOPODIACEAE				
<i>Atriplex heterosperma</i> Bunge	St. Louis	<i>Muehlenbach 1026</i>	MO	864A.09
<sup>9</sup> <i>Beta vulgaris</i> L.	St. Louis	<i>Muehlenbach 1963</i>	MO	864.09
<i>Chenopodium ficifolium</i> Smith	St. Louis	<i>D'Arcy 5963</i>	MO	859.09
<i>Chenopodium opulifolium</i> Schrader ex Koch & Ziz	St. Louis	<i>Muehlenbach 3301</i>	MO	860.09
<i>Chenopodium watsonii</i> Nelson	St. Louis	<i>Muehlenbach 1795</i>	MO	860.19
<i>Salsola collina</i> Pallas	St. Charles	<i>Yatskievych et</i> <i>al. 88-223</i>	MO	874.09
	St. Louis	<i>Muehlenbach 2176</i>	MO	

TABLE 2 (CONTINUED)

CISTACEAE				
<i>Helianthemum canadense</i> (L.) Michaux	Maries	Steyermark 27590	F	1552.09
CONVOLVULACEAE				
<i>Calystegia macounii</i> (E. Greene) Brummitt	Jackson	Bush 1998	MO	1780.09
<sup>6</sup> <i>Dichondra carolinensis</i> Michaux	Howell	Summers 2840	MO	1771.09
<i>Ipomoea amnicola</i> Morong	Jackson	Bush 9691	MO	1777.09
<i>Ipomoea cairica</i> (L.) Sweet	St. Louis	Muehlenbach 1711	MO	1778.09
<i>Jacquemontia tamnifolia</i> (L.) Griseb.	St. Louis	Muehlenbach 3188	MO	1778.09
<i>Stylisma pickeringii</i> (Torrey) A. Gray var. <i>pattersonii</i> (Fern. & B. G. Schubert) Myint	Clark	Conrad 11099	MO	1771.19
CRASSULACEAE				
<i>Sedum acre</i> L. ssp. <i>acre</i>	Iron St. Louis	Smith 1077 Sherff 191	F F	1113.09
CUCURBITACEAE				
<i>Cucumis sativus</i> L.	St. Louis	Muehlenbach 1847	MO	2093.09
DIPSACACEAE				
<i>Dipsacus laciniatus</i> L.	Boone Caldwell Calloway Cass Clark Cooper DeKalb Harrison Howard Johnson Knox	Baumgartner s.n. Dierker 1214 Dierker 1275 Henderson 78-08 Dierker 1223 Dierker 1350 Dierker 1212 Henderson 68-658 Dierker 1208 Philbrick 1634 Dierker 00695	MO UMO/ IPM UMO/ IPM UMKC UMO/ IPM UMO/ IPM UMO/ IPM UMKC UMO/ IPM UMO/ IPM UMO/ IPM	2088.09

TABLE 2 (CONTINUED)

	Lewis	<i>Huckla &amp; Obermeyer 00595</i>	UMO/ IPM	
	Linn	<i>Dierker 1311</i>	UMO/ IPM	
	Livingston	<i>Dierker 1215</i>	UMO/ IPM	
	Macon	<i>Dierker 1312</i>	UMO/ IPM	
	Marion	<i>Dierker 1618</i>	UMO/ IPM	
	Montgomery	<i>Gereau &amp; Brant 1814</i>	MO	
	Pike	<i>Summers 1101</i>	MO	
	Ralls	<i>Orzell 241</i>	MO	
	Randolph	<i>Dierker 1313</i>	UMO/ IPM	
	St. Louis	<i>Denison s.n.</i>	MO	
	Shelby	<i>Dierker 1558</i>	UMO/ IPM	
	Wright	<i>Gastaner 4334</i>	MO	
ELAEAGNACEAE				
<i>Elaeagnus umbellata</i> Thumb.	Douglas	<i>Smith 2850</i>	MO	1578.09
	St. Louis	<i>G. &amp; K. Yatskievych 91-40</i>	MO	
	Ste. Genevieve	<i>Muehlenbach 21354</i>	MO	
	Shannon	<i>G. &amp; K. Yatskievych 89-86</i>	MO	
	Stoddard	<i>Yatskievych &amp; Ladd 90-334</i>	MO	
	Warren	<i>Raechal et al. 119</i>	MO	
EUPHORBIACEAE				
<i>Acalypha deamii</i> (Weath.) H. E. Ahles	St. Louis	<i>Steyermark 479</i>	MO	1438.09
	Pulaski	<i>Steyermark 25410</i>	MO	
<i>Croton lindheimerianus</i> Scheele	St. Louis	<i>Muehlenbach 1965</i>	MO	1432.09
<i>Tragia betonicifolia</i> Nutt.	Jasper	<i>Demaree 40340</i>	SMU	1441.09
	McDonald	<i>Yatskievych &amp; Smith 90-212</i>	MO	
<i>Tragia ramosa</i> Torrey	Barry	<i>Bush 15010</i>	MO	1441.19
	Jasper	<i>Kellogg 1029</i>	MO	
	Ozark	<i>Palmer 34726</i>	MO	
	Ste. Genevieve	<i>Kellogg 1849</i>	MO	
	Stone	<i>Bush 15955</i>	MO	

TABLE 2 (CONTINUED)

FABACEAE				
<i>Aeschynomene indica</i> L.	New Madrid	<i>Steyermark 83501</i>	UMO	1324.09
	Stoddard	<i>Dunn 215557</i>	UMO	
<i>Desmodium strictum</i> (Pursh) D.C.	Stoddard	<i>Korschgen &amp; Toney</i>	UMO	1343.09
		<i>s.n.</i>		
<i>Lespedeza bicolor</i> Turcz.	St. Louis	<i>Muehlenbach 3671</i>	MO	1357.09
<i>Medicago minima</i> (L.) Bartal.	Scott	<i>Yatskievych</i>	MO	1304.09
		<i>et al. 89-92</i>		
<i>Pisum sativum</i> L. var. <i>sativum</i>	St. Louis	<i>Muehlenbach 2597</i>	MO	1382.09
<i>Vicia cracca</i> L.	St. Francois	<i>G. &amp; K. Yatskievych 89-54</i>	MO	1378.09
	St. Louis	<i>Muehlenbach 3571</i>	MO	
FAGACEAE				
<i>Quercus x introgressa</i> P. Thompson	Lafayette	<i>Thompson 74-161</i>	MO	765.09
FUMARIACEAE				
<i>Fumaria officinalis</i> L.	Holt	<i>Henderson 67-704</i>	UMKC	1037.09
GENTIANACEAE				
<i>Gentiana andrewsii</i> Griseb. var. <i>andrewsii</i>	St. Louis	<i>Letterman s.n.</i>	MO	1734.10
	Ste. Genevieve	<i>Steyermark 71039</i>	F	
GERANIACEAE				
<i>Erodium texanum</i> A. Gray	St. Louis	<i>Muehlenbach 1711</i>	MO	1417.09
GROSSULARIACEAE				
<sup>11</sup> <i>Ribes americanum</i> Miller	Schuyler	<i>Ladd 15130</i>	MOR	1133.09
HALORAGACEAE				
<i>Myriophyllum spicatum</i> L.	Carter	<i>Summers 778</i>	MO	1623.09
	Crawford	<i>Summers 1474</i>	MO	
	Montgomery	<i>Brant &amp; Gereau 694</i>	MO	
HYDRANGEACEAE				
<i>Philadelphus coronarius</i> L.	St. Louis	<i>Muehlenbach 2858</i>	MO	1128.09

TABLE 2 (CONTINUED)

LAMIACEAE				
<i>Leonurus marrubiastrum</i> L.	Holt	<i>Priesendorf 847</i>	MO	1875.09
<i>Lycopus uniflorus</i> Michaux	Miller	<i>Steyermark 6766</i>	F	1907.09
	Ste. Gene- vieve	<i>Trelease 1148</i>	MO	
	St. Louis	<i>Pammel s.n.</i>	MO	
	Scotland	<i>Steyermark</i>	F	
<i>Stachys hyssopifolia</i> Michaux	St. Louis	<i>Eggert s.n.</i>	MO	1881.09
<i>Stachys pilosa</i> Nutt. var.	Franklin	<i>Berg 7</i>	MO	1879.30
<i>arenicola</i> (Britton) G. Mulligan	St. Louis	<i>Comte 2427</i>	MO	
LINACEAE				
<i>Linum virginianum</i> L.	Bollinger	<i>Steyermark 14119</i>	MO	1407.09
	Christian	<i>Steyermark 23179</i>	MO	
	Franklin	<i>Steyermark 8264</i>	MO	
	Greene	<i>Blankenship s.n.</i>	MO	
	Howell	<i>Steyermark 23440</i>	MO	
	Iron	<i>Kellogg 1830</i>	MO	
	McDonald	<i>Bush s.n.</i>	MO	
	Ozark	<i>G. &amp; K. Yatskievych</i> <i>91-145</i>	MO	
	Reynolds	<i>Steyermark 19722</i>	MO	
	Shannon	<i>Steyermark 12212</i>	MO	
Wayne	<i>Steyermark 6437</i>	MO		
LOASACEAE				
<i>Mentzelia albescens</i> (Gillies & Arn.) Griseb.	Crawford	<i>Christ s.n.</i>	MO	1574.09
	Jasper	<i>Palmer 69221</i>	MO	
	Pulaski	<i>Summers 4670</i>	MO	
MAGNOLIACEAE				
<i>Magnolia tripetala</i> L.	St. Louis	<i>Harriman 3071</i>	OSH	960.09
MALVACEAE				
<i>Gossypium hirsutum</i> L.	Dunklin	<i>Eggert s.n.</i>	MO	1534.09
	Jasper	<i>Palmer 1488</i>	MO	
	Jackson	<i>Bush 9473</i>	MO	
	St. Louis	<i>Muehlenbach 3031</i>	MO	
MIMOSACEAE				
<i>Albizia julibrissin</i> Durazz.	Stoddard	<i>Yatskievych &amp;</i> <i>Ladd 90-338</i>	MO	1271.09
	Wayne	<i>Thompson s.n.</i>	BEREA	

TABLE 2 (CONTINUED)

OLEACEAE					
<sup>4</sup> <i>Ligustrum obtusifolium</i> Sieb. & Zucc.	Franklin	<i>Davit s.n.</i>	MO	1722.09	
<sup>4</sup> <i>Ligustrum sinense</i> Lour.	Dunklin	<i>Yatskievych &amp; Ladd 90-296</i>	MO	1722.19	
ONAGRACEAE					
<i>Gaura sinuata</i> Nutt. ex Ser.	St. Louis	<i>Muehlenbach 2760</i>	MO	1618.09	
<i>Oenothera clelandii</i> W. Dietr., Raven & W. L. Wagner	Clark Jackson	<i>Wilson s.n.</i> <i>Bush 2139</i>	MO MO	1604.09	
	St. Louis	<i>Muehlenbach 942</i>	MO		
	Washington	<i>Bush 9414</i>	F		
<i>Oenothera heterophylla</i> Spach ssp. <i>heterophylla</i>	St. Louis	<i>Muehlenbach 1018</i>	MO	1604.19	
OROBANCHACEAE					
<i>Orobanche multiflora</i> Nutt.	McDonald Taney	<i>Drew s.n.</i> <i>Smith 2903</i>	UMO MO		2015A.09
PAPAVERACEAE					
<i>Eschscholzia californica</i> Cham.	St. Louis	<i>Muehlenbach 1788</i>	MO	1029.09	
PLANTIAGINACEAE					
<i>Plantago arenaria</i> Waldst. & Kit.	St. Louis	<i>Muehlenbach 3977</i>	MO	2036.09	
<i>Plantago wrightiana</i> Decne.	St. Louis	<i>Muehlenbach 1779</i>	MO	2030.09	
PLUMBAGINACEAE					
<i>Ceratostigma plumbaginoides</i> Bunge	Boone	<i>Dunn 22697</i>	UMO	844.09	
POLYGONACEAE					
<i>Polygonum cuspidatum</i> Siebold & Zucc. var. <i>compactum</i> (Hook. f.) L. H. Bailey	St. Louis	<i>Muehlenbach 3356</i>	MO	841.10	
<i>Rumex dentatus</i> L.	St. Louis	<i>Muehlenbach 3195</i>	MO	817.09	
PRIMULACEAE					
<i>Dodecatheon frenchii</i> (Vasey) Rydb.	Ste. Genevieve	<i>Nelson 1809</i>	MO	1698.09	

TABLE 2 (CONTINUED)

RANUNCULACEAE				
<i>Anemone quinquefolia</i> L.	Shannon	<i>Christ s.n.</i>	MO	1001.09
<i>Caltha palustris</i> L. var. <i>palustris</i>	Lafayette	<i>Gremaud s.n.</i>	MO	964.09
<i>Clematis catesbyana</i> Pursh	Barry	Trelease 935	MO	1004.09
	Christian	<i>Steyermark 23111</i>	MO	
	Douglas	<i>Steyermark 23642</i>	MO	
	Greene	<i>Stalker &amp; Nelson</i>	NCU	
		478		
	Howell	<i>Summers 1079</i>	MO	
	Shannon	<i>Bush 1</i>	MO	
	Stone	<i>Palmer 23881</i>	MO	
<i>Consolida regalis</i> Gray	Taney	<i>Bush 99</i>	MO	
	St. Louis	<i>Muehlenbach 3106</i>	MO	971.09
<i>Ranunculus ficaria</i> L. var.	Cole	<i>Figg s.n.</i>	MO	995A.09
<i>pulbifera</i> Marsden-Jones	St. Louis	<i>Brown s.n.</i>	MO	995A.09
<sup>10</sup> <i>Ranunculus testicularis</i> Crantz	Lewis	<i>Ladd 14840</i>	MO	981.09
	Lincoln	<i>Schuetz 1380</i>	MO	
	Montgomery	<i>D. &amp; C. Darigo 1101</i>	MO	
RESEDACEAE				
<i>Reseda lutea</i> L. ssp. <i>lutea</i> var. <i>lutea</i>	St. Louis	<i>Muehlenbach 3931</i>	MO	1110.09
ROSACEAE				
<sup>4</sup> <i>Aphanes microcarpa</i> (Boiss. & Reuter) Rothm.	Howell	<i>Summers 3248</i>	MO	1241.09
<i>Geum virginianum</i> L.	Ste. Genevieve	<i>Solecki</i>	MODNR	
<i>Malus baccata</i> (L.) Borkh.	St. Louis	<i>Muehlenbach 3402</i>	MO	1147.09
<i>Potentilla argentea</i> L.	St. Louis	<i>Muehlenbach 3584</i>	MO	1215.09
<i>Prunus armeniaca</i> L.	St. Louis	<i>Muehlenbach 2987</i>	MO	1263.09
<i>Spiraea x vanhouttei</i> (Briot) Zabel	Barry	<i>Redfearn &amp; Eggers</i>	SMS	1139.09
		14431		
	Stoddard	<i>Hall 42</i>	SEMO	
RUBIACEAE				
<i>Galium divaricatum</i> Pourret ex Lam.	Henry	<i>Castaner 5831</i>	WARM	2039.09
<i>Galium pedemontanum</i> (Bellardi) All.	Christian	<i>Sanders 2801</i>	SOTO	2039.19
	Cole	<i>Raveill 2053</i>	MO	
	Greene	<i>Brant &amp; Gereau 552</i>	MO	
	Iron	<i>Ahles 7960</i>	KANU	
	Oregon	<i>Summers 3177</i>	MO	
Osage	<i>Brant &amp; O'Donnell</i>	MO		
		1853		

TABLE 2 (CONTINUED)

	Taney Wright	Sanders 2785 Brant & Gereau 560	MICH MO	
SALICACEAE				
<i>Salix x rubens</i> Schrank	St. Louis	Muehlenbach 2068	MO	718.09
SAXIFRAGACEAE				
<i>Heuchera americana</i> L. var. <i>americana</i>	McDonald St. Louis	Kellogg s.n. Engelmann s.n.	MO WIS	1124.20
SCROPHULARIACEAE				
<i>Veronica anagallis-aquatica</i> L.	Taney	Olson s.n.	SOTO	1986.09
<sup>4</sup> <i>Veronica beccabunga</i> L.	Ste. Gene- vieve	Summers 219	MO	1986.19
<i>Veronica chamaedrys</i> L.	Boone	Love 438	UMO	1986.29
<i>Veronica hederifolia</i> L.	Barry Greene Jefferson	Toney s.n. Key 2128 Yatskievych et al. 90-25	UMO SMS MO	1989.09
<i>Veronica latifolia</i> L.	St. Louis Johnson	Anderson s.n. Barrow 140	MO WARM	1986.39
<i>Veronica persica</i> Poiret	Boone Johnson	Dunn 23526 Praetorius 63	UMO WARM	1989.19
SOLANACEAE				
<i>Physalis acutifolia</i> (Wiers) Sandw.	St. Louis	Muehlenbach 759	MO	1935.09
<i>Physalis alkekengi</i> L.	Boone Callaway	Dunn 13806 Craghead s.n.	UMO UMO	1937.09
STERCULIACEAE				
<i>Melochia corchorifolia</i> L.	St. Louis	Muehlenbach 2880	MO	1514.09
ULMACEAE				
<i>Ulmus crassifolia</i> Nutt.	Butler Dunklin	Pelton s.n. Heineke s.n.	MO MO	780.09
VALERIANACEAE				
<i>Valerianella woodsiana</i> (Torrey & A. Gray) Walp.	St. Louis	Glatfelter s.n.	MICH	2086.09



TABLE 2 (CONTINUED)

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VERBENACEAE				
<i>Verbena brasiliensis</i> Vell. Conc.	St. Louis	<i>Muehlenbach</i> 3439	MO	1840.09
<i>Verbena officinalis</i> L. ssp. <i>halei</i> (Small) S. Barber	St. Louis	<i>Muehlenbach</i> 1256	MO	1840.19
VIOLACEAE				
<i>Viola arvensis</i> Murray	St. Louis	<i>Muehlenbach</i> 3863	MO	1571.09
VITACEAE				
<sup>11</sup> <i>Parthenocissus tricuspidata</i> (Sieblod & Zucc.) Planchon	St. Louis	<i>Muehlenbach</i> 2927	MO	1504.09

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<sup>1</sup> The Nature Conservancy, 1991<sup>2</sup> Carter and Bryson, 1991<sup>3</sup> Whitley et al., 1990<sup>4</sup> Yatskievych and Summers, 1991<sup>5</sup> Ebinger and McClain, 1991<sup>6</sup> Summers and Yatskievych, 1990<sup>7</sup> Ladd, 1990<sup>8</sup> Sullivan, 1991<sup>9</sup> Muehlenbach, 1979<sup>10</sup> Ladd and Schuette, 1990<sup>11</sup> Ladd et al., 1991

## A NEW *ERYNGIUM* FOR MISSOURI

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In late September, 1990, a specimen of Leavenworth eryngo, *Eryngium leavenworthii* Torrey & Gray was submitted for identification to the Integrated Pest Management office of the University, Columbia. The specimen was subsequently deposited as a voucher specimen in the University of Missouri Herbarium (UMO), UMO #178954. Based upon questionable label information on an 1879 specimen collected by Broadhead, Steyermark (1963) excluded this species from his flora of the state. Therefore, the collection reported here is a new record for Missouri.

According to R. Redman of the U.S.D.A., S.C.S. Office in Butler, MO, the specimen, along with several hundred others of the same species, was growing in a pasture in Bates County a few miles east of Butler. A variety of native grasses and introduced forbs and grasses constituted the plant community of the pasture. Information submitted with the plant indicated that several plants had been noted in the pasture in 1989. By 1990 several hundred had appeared. It was conjectured that the seed was probably contained in hay brought in from Nebraska in 1988. However, neither the Great Plains Flora Association (G.P.F.A.) (1977) nor McGregor (1986) indicate the presence of this plant in Nebraska. This, however, does not negate its unreported presence there. The presence of the plant in Crawford, Bourbon, and Linn Counties, Kansas which border Missouri in the vicinity of Bates County Missouri is indicated (G.P.F.A. 1977).

*Eryngium leavenworthii* is readily separated from the other two species of the genus known to Missouri. It is separated from *Eryngium yuccifolium*, which has parallel-veined leaves, by its spine tipped, net-veined, palmately pinnatifid leaves. The purplish to reddish (white) flowering heads topped by four to eight erect spinescent bractlets 1-3.5 cm long are strikingly different from the whitish flowering heads of *Eryngium yuccifolium*, which lack these terminal bractlets. *Eryngium leavenworthii* is an annual or winter annual with a taproot: *Eryngium yuccifolium* is a perennial with fascicles of tuberous roots. Both *Eryngium leavenworthii* and *E. yuccifolium* are erect growing plants while the third species, *Eryngium prostratum*, grows prostrate on the ground, has small heads of blue flowers,

and is a perennial with fibrous roots.

#### LITERATURE CITED

- McGregor, R. L. 1986. Apiaceae, pp. 594-604 in Great Plains Flora Association, *Flora of the Great Plains*. Univ. Press of Kansas, Lawrence. vii, 1392 pp.
- Great Plains Flora Association. 1977. *Atlas of the Flora of the Great Plains*. Iowa State Univ. Press., Ames. xiii, 699 pp.
- Steyermark, J. A. 1963. *Flora of Missouri*. Iowa State Univ. Press, Ames. lxxxiii, 1725 pp.