



# The New Mexico Botanist

Number 44

October 16, 2008

A Newsletter for the flora of New Mexico, from the Range Science Herbarium and Cooperative Extension Service, College of Agriculture and Home Economics, New Mexico State University.

## In This Issue —

- Statistical Summary of New Mexico plants.... 1
- Plant Distribution Reports..... 7
- Botanical Literature... 7

## Second Statistical Summary of the Flora of New Mexico

Kelly W. Allred

Range Science Herbarium (NMCR), Department of Animal & Range Sciences  
New Mexico State University, Las Cruces, NM 88003 kallred@nmsu.edu

It has been five years since the first Statistical Summary of the Flora of New Mexico (The New Mexico Botanist 28:1-7, 2003). Since 1995, when we first began keeping score, there has been an average of 34 new species recorded for the state each year. I take this summary from the recently published "Flora Neomexicana I: The Vascular Plants of New Mexico (Allred 2008, available at lulu.com).

Group	Genera	Native Species 88%	Exotic Species 12%	Total Species	Additional Intraspecific Taxa	Total Taxa
Ferns & Fern Allies	28	83	1	84	4	88
Gymnosperms	7	28	0	28	2	30
Dicots	747	2503	325	2828	381	3209
Monocots	199	624	132	756	65	821
Totals	981	3238	458	3696	452	4148

### Ferns and Fern Allies

Family	Genera	Species				
		Native 99%	Exotic 1%	Total Species	Additional Intraspecific Taxa	Total Taxa
Aspleniaceae	1	4	0	4	0	4
Azollaceae	1	1	0	1	0	1
Dennstaedtiaceae	1	1	0	1	0	1
Dryopteridaceae	6	15	0	15	0	15
Equisetaceae	1	6	0	6	0	6
Isoëtaceae	1	1	0	1	0	1
Lycopodiaceae	2	3	0	3	0	3
Marsileaceae	1	1	0	1	0	1
Ophioglossaceae	2	7	0	7	0	7
Polypodiaceae	1	2	0	2	0	2
Pteridaceae	9	31	0	31	3	34
Salviniaceae	1	0	1	1	0	1
Selaginellaceae	1	11	0	11	1	12
Totals	28	83	1	84	4	88

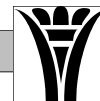
**Botanice est Scientia Naturalis quae Vegetabilium cognitiorem tradit.**

— *Linnaeus*



Gymnosperms						
Family	Genera	Species				
		Native 100%	Exotic 0%	Total Species	Additional Intraspecific Taxa	Total Taxa
Cupressaceae	2	8	0	8	0	8
Ephedraceae	1	6	0	6	0	6
Pinaceae	4	14	0	14	2	16
Totals	7	28	0	28	2	30

Dicotyledonous Plants						
Family	Genera	Species				
		Native 86%	Exotic 14 %	Total Species	Additional Intraspecific Taxa	Total Taxa
Acanthaceae	10	11	0	11	0	11
Adoxaceae	2	3	0	3	2	5
Aizoaceae	2	2	0	2	0	2
Amaranthaceae	9	26	7	33	5	38
Anacardiaceae	2	6	0	6	6	12
Apiaceae	36	59	10	69	1	70
Apocynaceae	5	10	1	11	3	14
Araliaceae	1	1	0	1	0	1
Aristolochiaceae	1	2	0	2	0	2
Asclepiadaceae	4	35	0	35	1	36
Asteraceae	135	577	52	629	92	721
Berberidaceae	1	6	1	7	0	7
Betulaceae	3	5	0	5	0	5
Bignoniaceae	2	2	1	3	1	4
Bixaceae	1	1	0	1	0	1
Boraginaceae	17	57	4	61	13	74
Brassicaceae	49	101	51	152	26	178
Buddlejaceae	1	1	0	1	0	1
Cactaceae	14	58	1	59	8	67
Campanulaceae	4	7	1	8	1	9
Cannabaceae	3	4	2	6	0	6
Caprifoliaceae	5	15	4	19	0	19
Caryophyllaceae	18	53	13	66	3	69
Celastraceae	2	2	0	2	0	2
Ceratophyllaceae	1	1	0	1	0	1



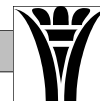
Chenopodiaceae	18	43	20	63	10	73
Cistaceae	1	2	0	2	0	2
Cleomaceae	4	8	1	9	1	10
Convolvulaceae	7	40	5	45	2	47
Cornaceae	1	2	0	2	0	2
Crassulaceae	2	7	0	7	2	9
Crossosomataceae	2	2	0	2	1	3
Cucurbitaceae	12	13	4	17	2	19
Elaeagnaceae	2	2	1	3	0	3
Elatinaceae	2	3	0	3	0	3
Ericaceae	10	19	0	19	0	19
Euphorbiaceae	11	69	3	72	2	74
Fabaceae	55	239	33	272	76	348
Fagaceae	1	15	0	15	0	15
Fouquieriaceae	1	1	0	1	0	1
Frankeniaceae	1	1	0	1	0	1
Fumariaceae	1	2	0	2	1	3
Garryaceae	1	2	0	2	0	2
Gentianaceae	10	21	1	22	2	24
Geraniaceae	2	7	1	8	0	8
Grossulariaceae	1	10	0	10	1	11
Haloragaceae	1	3	2	5	0	5
Heliotropaceae	1	4	0	4	1	5
Hydrangeaceae	4	5	0	5	4	9
Hydrophyllaceae	5	33	0	33	1	34
Hypericaceae	1	2	0	2	0	2
Juglandaceae	1	3	0	3	0	3
Koeberliniaceae	1	1	0	1	0	1
Krameriaceae	1	3	0	3	0	3
Lamiaceae	21	29	9	38	6	44
Lentibulariaceae	1	1	0	1	0	1
Linaceae	1	13	1	14	0	14
Loasaceae	2	20	0	20	3	23
Loganiaceae	1	1	0	1	0	1

**Botany is the natural science that transmits the knowledge of plants.**

— *Linnaeus*



Lythraceae	5	6	1	7	0	7
Malpighiaceae	2	2	0	2	0	2
Malvaceae	14	36	8	44	5	49
Meliaceae	1	0	1	1	0	1
Menyanthaceae	1	1	0	1	0	1
Molluginaceae	1	1	1	2	0	2
Moraceae	2	1	2	3	0	3
Nyctaginaceae	10	39	0	39	7	46
Nymphaeaceae	2	1	2	3	0	3
Oleaceae	5	14	3	17	0	17
Onagraceae	9	58	0	58	10	68
Orobanchaceae	9	46	0	46	2	48
Oxalidaceae	1	6	0	6	1	7
Papaveraceae	3	5	2	7	2	9
Parnassiaceae	1	2	0	2	0	2
Passifloraceae	1	1	0	1	0	1
Pedaliaceae	1	4	0	4	0	4
Phytolaccaceae	2	2	0	2	0	2
Plantaginaceae	16	83	10	93	11	104
Platanaceae	1	1	0	1	0	1
Plumbaginaceae	1	1	0	1	0	1
Polemoniaceae	11	58	0	58	5	63
Polygalaceae	2	13	0	13	1	14
Polygonaceae	12	76	13	89	11	100
Portulacaceae	5	25	3	28	2	30
Primulaceae	8	14	2	16	0	16
Rafflesiaceae	1	1	0	1	0	1
Ranunculaceae	12	60	4	64	3	67
Resedaceae	1	1	0	1	0	1
Rhamnaceae	6	14	0	14	1	15
Rosaceae	25	69	10	79	13	92
Rubiaceae	7	22	1	23	4	27
Rutaceae	3	3	0	3	5	8
Salicaceae	2	30	4	34	5	39
Santalaceae	1	1	0	1	0	1
Sapindaceae	3	5	0	5	4	9
Sapotaceae	1	1	0	1	0	1



Saururaceae	1	1	0	1	0	1
Saxifragaceae	5	25	0	25	0	25
Scrophulariaceae	3	6	3	9	0	9
Simaroubaceae	1	0	1	1	0	1
Solanaceae	9	31	15	46	6	52
Sterculiaceae	1	3	0	3	0	3
Tamaricaceae	1	0	3	3	0	3
Ulmaceae	1	0	1	1	0	1
Urticaceae	3	5	1	6	1	7
Verbenaceae	8	28	2	30	5	35
Violaceae	2	8	0	8	0	8
Viscaceae	2	12	0	12	0	12
Vitaceae	3	5	0	5	0	5
Zygophyllaceae	5	5	3	8	0	8
Totals	747	2503	325	2828	381	3209

Monocotyledonous Plants						
Family	Genera	Species				
		Native 83%	Exotic 17%	Total Species	Additional Intraspecific Taxa	Total Taxa
Agavaceae	2	17	0	17	4	21
Alismataceae	3	11	0	11	0	11
Alliaceae	2	13	0	13	1	14
Amaryllidaceae	1	1	0	1	0	1
Anthericaceae	2	2	0	2	0	2
Asparagaceae	1	0	1	1	0	1
Asphodelaceae	1	0	1	1	0	1
Bromeliaceae	1	1	0	1	0	1
Commelinaceae	2	5	0	5	1	6
Convallariaceae	2	3	0	3	0	3
Cyperaceae	14	142	1	143	1	144
Hyacinthaceae	1	0	1	1	0	1
Hydrocharitaceae	4	6	1	7	0	7
Hypoxidaceae	1	1	0	1	0	1
Iridaceae	2	6	1	7	0	7
Juncaceae	2	26	0	26	1	27
Juncaginaceae	1	2	0	2	0	2



Lemnaceae	2	9	0	9	0	9
Liliaceae	7	11	0	11	1	12
Melanthiaceae	4	7	0	7	0	7
Nolinaceae	2	6	0	6	0	6
Orchidaceae	14	30	1	31	4	35
Poaceae	118	301	123	424	50	474
Pontederiaceae	1	2	0	2	0	2
Potamogetonaceae	2	12	1	13	2	15
Ruppiaceae	1	1	0	1	0	1
Sparganiaceae	1	3	0	3	0	3
Themidaceae	3	3	0	3	0	3
Typhaceae	1	2	1	3	0	3
Zannichelliaceae	1	1	0	1	0	1
Totals	199	624	132	756	65	821



### Plant Distribution Reports

New records and significant distribution reports for New Mexico plants should be documented by complete collection information and disposition of a specimen (herbarium). Exotic taxa are indicated by an asterisk (\*), endemic taxa by a cross (+).

— Joe Ward [905 Deer Trail, Farmington, NM 87401]

***Leymus cinereus*** (Scribner & Merrill) Love (Poaceae, Great Basin wildrye): San Juan County: at Ward residence, 905 Deer Trail, Farmington, NM, riparian bosque along La Plata River, 8-9 feet tall, 7 Aug 2008, **Joe Ward s.n.** (NMCR).

[An earlier report of *Leymus cinereus* was in error, the specimen being *Leymus racemosus*. This marks the first validated specimen known from the state. It is considered native in that habitat along the San Juan River.]

— Richard Spellenberg [Biology Department, New Mexico State University, Las Cruces, NM 88003]

\****Ipomoea cordatotriloba*** Dennst. var. ***torreyana*** (A. Gray) D. Austin (Convolvulaceae, Torrey's tievine): Doña Ana

County: Las Cruces, N side of Telshor Blvd. 1 block SW of junction with Del Rey Blvd., 32°20'57.4" N, 106°45'55.5"W. Elev. 1245 m. Weed twining in shrubs of commercial landscaping between parking lot and sidewalk. Corolla pale rose-violet, violet in tube, the exterior uniformly paler. 3 Oct 2008, **R. Spellenberg 14069** (BRIT, NMC). Identification confirmed via photos by Dan Austin. [Apparent first report for NM of this central Texas perennial, probably arriving in soil associated with landscape shrubbery. I had been riding my bicycle past this all summer noting that I did not know this morning glory; making this collection showed why. I have not seen it elsewhere in the area.]

### Botanical Literature of Interest

Alexander, P.J. 2008. ***Heuchera woodsiiaphila*** (Saxifragaceae), a new species from the Capitan Mountains of New Mexico. *J. Bot. Res. Inst. Texas* 2(1):447-453

Allred, K.W. 2008. ***Flora Neomexicana I: The Vascular Plants of New Mexico*** (An annotated checklist to the names of vascular plants, with synonymy and bibliography). Available at lulu.com.

Heklau, H. & M. Roser. 2008. **Delineation, taxonomy and phylogenetic relationships of the genus *Krascheninnikovia*** (Amaranthaceae subtribe Axyridinae). *Taxon* 57(2):563-576.

Kindscher, K. & W. Norris (eds.). 2008. **Proceedings of Natural History of the Gila: A Symposium** held October 6-8, 2006. *The New Mexico Botanist Special Issue 1*. Available online at the Range Science Herbarium homepage (<http://>

[cahe.nmsu.edu/academics/rangescienceherbarium/](http://cahe.nmsu.edu/academics/rangescienceherbarium/)), and take the link to The New Mexico Botanist newsletter, or hard copies may be requested from Bill Norris ([norrisw@wnmu.edu](mailto:norrisw@wnmu.edu), or Department of Natural Sciences, Western New Mexico University, Silver City, NM 88061).

Krings, A., D.T. Thomas, & Q. Xiang. 2008. **On the generic circumscription of *Gonolobus* (Apocynaceae, Asclepiadoideae): Evidence from molecules and morphology.** *Syst. Bot.* 33(2):403-415.

Welsh, S. L. 2007. **North American Species of *Astragalus Linnaeus* (Leguminosae).** Stanley L. Welsh Herbarium, Monte L. Bean Life Science Museum, Brigham Young University, Provo, UT. 932 pp.



### **Publication and Subscription Information**

"The New Mexico Botanist" is published irregularly (as information accrues) at no charge. You may be placed on the mailing list by sending your name and complete mailing address to the editor:

Kelly Allred  
The New Mexico Botanist  
MSC Box 3-I  
New Mexico State University  
Las Cruces, NM 88003

or

Email: kallred@nmsu.edu

Available on-line at <http://cahe.nmsu.edu/academics/rangescienceherbarium/>

Kelly Allred



*The New Mexico  
Botanist*

#### **COOPERATIVE EXTENSION SERVICE**

U.S. Department of Agriculture  
New Mexico State University  
Las Cruces, NM 88003