

# Leticia Cabrera R. Curriculum Vitae

ASSISTANT PROFESSOR

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## Education

- 1992 | Ph.D.  
Department of Botany, The University of Texas at Austin  
Dissertation: Systematics of *Rzedowskiella* Gen. Nov. (Asteraceae: Mutisieae: Nassauviinae).  
Advisor: Dr. Beryl B. Simpson
- 1985 | B.S.  
The Science Faculty, The National Autonomous University of Mexico  
Thesis: El Género *Cosmos* (Compositae) en Veracruz.

## Professional Experience

- 2018-P | Assistant Professor, Northwest Missouri State University, Maryville, MO  
• Curator of the Northwest Missouri State University Herbarium (NMSU)  
• Manager and Supervisor of the Natural Sciences Greenhouse
- 2017-2018 | Adjunct Professor, Conception Abby Seminary-College, Conception, MO
- 2014-2018 | Adjunct Professor, Missouri Western State University, St. Joseph, MO
- 2003-2018 | Professor, Northwest Missouri State University, Maryville, MO
- 2005-2014 | Assistant Professor, Iowa Western Community College, Clarinda, IA
- 1999-2003 | Assistant Professor, University of Texas at Brownsville, Brownsville, TX  
• Curator of the Runyon Herbarium (RUNYON)
- 1995-1999 | Assistant Professor, Western Illinois University, Macomb, IL  
• Curator of the R. M. Myers Herbarium (MWI)
- 1992-1993 | Researcher, Institute of Ecology, Xalapa, Veracruz, Mexico

## Professional Development

2024	Missouri Academy of Science Annual Meeting, Missouri Western State University, St. Joseph MO, 13 April
2018	Annual Fall Symposium, Missouri Botanical Garden, St. Louis, MO, 13 October
2018	.EDU Conference, Northwest Missouri State University, MO 24 September
2016	Vernier Workshop, Kansas City, MO
2008-2012	Iowa Community College Online Consortium (ICCO) Annual Meeting
2007	National Association of Biology Teachers. Annual Meeting, Atlanta, GA, 27 Nov – 1 Dec
2007	Biotechnology Workshop: offered at University of Iowa. Summer
2006	AIBS Annual Meeting. Biodiversity: The Interplay of Science, Valuation, and Policy, Washington, D.C., 24, 25 May
2006	AAAS Annual Meeting, “Grand Challenges, Great Opportunities”, St. Louis, MO, 16 – 20 February
2001	Title V Summer Institute on Teaching and Learning, University of Texas at Brownsville, 21 May – 1 June
2000	Participant in the “2000 Biodiversity Assessment and Monitoring for Adaptive Management Course”, Smithsonian Institution’s Monitoring and Assessment of Biodiversity Program (SI/MAB), Conservation and Research Center, Front Royal, VA, 14 May – 16 June, 230 hours of training
2000	Participant in the “Smithsonian Environmental Leadership Course”, sponsored by the SI/MAB Program, Conservation and Research Center, Smithsonian Institution, Front Royal, VA. September, 80 hours of training
1990	Participant in “Workshop on Allozyme Techniques” and “Workshop on Molecular Techniques (PCR)”, Mountain Lake Biological Station, University of Virginia, VA

## Professional Skills

- Spanish – fluent, native speaker
- Learning Management Platform – Canvas, eCompanion, Moodle, Sail
- Light Microscopy

- Plant histological techniques

## Courses Taught

Introduction to Biology I & II (WIU, UTB, IWCC)	Evolution & Biodiversity (NWMSU)
General Biology (non-majors) (online NWMSU, MWSU)	Biological Sciences Seminar (NWMSU)
Local Flora (WIU, NWMSU)	Nutrition (IWCC, online ICCOC)
Plant Systematics (WIU, UTB)	Anatomy & Physiology I & II (IWCC)
Plant Anatomy (UTB)	Human Biology (IWCC, online ICCOC)
Plant Morphology (UTB)	Wellness & Fitness (MWSU)
Marine Botany (UTB)	General Botany (NWMSU)
Plant Biology (online ICCOC)	

## Service

	<u>International Committees</u>
1996-2000	• Evaluation Committee <i>Biotam</i> , Instituto de Ecología y Alimentos, Universidad de Tamaulipas, Tamaulipas, México
1986-1995	• Editorial Committee Member, <i>Flora of Veracruz</i> , Instituto de Ecología, A. C., Xalapa, Veracruz, México
1986-1987	• Executive Editor, <i>Flora of Veracruz</i> , Instituto de Ecología, A. C., Xalapa, Veracruz, México
	<u>National Committees</u>
2011-2015 2000-2006	• Plant Variety Protection Advisory Board, United States Department of Agriculture (3 terms)
	<u>Institutional Governance Committees</u>
	<i>College/University Committees and Associations:</i>
	• Graduate Faculty, College of Arts and Sciences Faculty Council, International Programs, Graduate Curriculum, Recruitment-Retention, Program Review Evaluation Committee, Academic Appeals
	<u>Departmental Committees</u>
	• Standing: Scheduling, Undergraduate Curriculum, Scholarship, Academic Appeals, General Biology Review, Anatomy Position Search, Biologist Position Search
	<u>Peer-Reviewer</u>
	• <i>Illinois Academy of Sciences</i>
	• <i>Novon</i> (Missouri Botanical Garden)

## Scholarships, Awards, Honors

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|-----------|--|
| 2002      | Biographee, <i>Who's Who in the 21<sup>st</sup> Century</i> , 2 <sup>nd</sup> edition, International Biographical Centre, Cambridge, England |
| May 2002  | Hispanic Scholarship, Latino Initiative Programs, Smithsonian Institution, Washington, D. C.   |
| Sept 2002 | Hispanic Scholarship, Latino Initiative Programs, Smithsonian Institution, Washington, D. C.   |
| 1992      | Memorial Fellowship for scholastic achievement, University of Texas at Austin, TX  |
| 1990      | Walton Scholarship, Mountain Lake Biological Station, University of Virginia, VA   |

## Societies

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| Botanical Society of America  |
| Missouri Native Plant Society |

## Field Research Experience

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| Southwest USA: 10 years (TX, NM, AZ) |
| Midwest USA: 30 years (IL, MO)       |
| Mexico: 9 years                      |

## Grants and Contracts

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| 2019 | Dieringer, G., <b>L. Cabrera R.</b> , S. Riley. Pollination ecology and floral scent in sympatric populations of <i>Arisaema triphyllum</i> and <i>A. dracontium</i> (Araceae) in northwest Missouri. Faculty Research Grant, Northwest Missouri State University, \$600 |
| 2003 | Dieringer, G., J. Padgitt, and <b>L. Cabrera R.</b> Course Resign of General Biology Laboratory Center for Informational Technology in Education, Northwest Missouri State University, \$2,500   |
| 2000 | <b>L. Cabrera R.</b> and G. Dieringer. Herbarium Enrichment and Database for the Biological Science  |

- Department of the University of Texas at Brownsville, TX, Kleberg Foundation, \$50,000
- 2000 | A. J. Abell, **L. Cabrera R.**, G. Dieringer, J. González-Ramos, and D. L. McNeely. Enhancement of Resources for Environmental Education and Research at the University of Texas at Brownsville Army Research Office, Durham, NC, (\$199,910 with \$100,000 matching), \$299,910
- 1996 | **L. Cabrera R.** Palynology of the Genus *Acourtia* (Asteraceae), University Research Council, Western Illinois University, \$3000
- 1996 | G. Dieringer and **L. Cabrera R.** Beetle Pollination and Floral Thermogenicity in *Magnolia tamaulipana* (Magnoliaceae), Michaux Grant, American Philosophical Society, \$3800
- 1989 | **L. Cabrera R.** Pollination Biology of *Acourtia runcinata* (Asteraceae), Preserves Mini Grant, Austin Parks and Recreation, \$305

### Supervised Research

- Stirling, H. 2003. Effect of Japanese Beetle Floral Herbivory on Three Species of Milkweed in Nodaway Co. [Independent study project]. Northwest Missouri State University, Maryville, MO.
- Delaune S. 2001. Floristic Survey of the Spoonbill Resaca at the Lennox Center, Brownsville, TX [master's non-thesis]. University of Texas at Brownsville, Brownsville, TX.
- Callihan, D. P. A. 1999. Floristic Survey of Horn Field Campus of Western Illinois University [master's thesis]. Western Illinois University, Macomb, IL.

### Presentations

- Dieringer, G. and **L. Cabrera R.** 2023. Pollination and breeding system in *Penstemon pallidus* (Plantaginaceae). Abstract. Poster. Missouri Academy of Science 59<sup>th</sup> Annual Meeting, Missouri Southern State University, Joplin, MO, 21-22 April.
- Agalinis* (Orobanchaceae). Abstract. Poster presentation. Missouri Academy of Science 58<sup>th</sup> Annual Meeting, Northwest Missouri State University, Fayette, MO, 22-23 April.
- Dieringer, G. and **L. Cabrera R.** 2019. Phenotypic selection on staminal trichomes of *Agalinis auriculata* (Orobanchaceae). Abstract. Oral presentation. Missouri Academy of Science 55<sup>th</sup> Annual Meeting, Northwest Missouri State

University, Maryville, MO, 12-13 April. 47: 40.  
<https://doi.org/10.30956/MAS-36>.

Dieringer, G. and **L. Cabrera R.** 2011. Ecological relationship between flora thermogenesis and pollination in *Nelumbo lutea* (Nelumbonaceae). Poster presentation. Botany 2011 Conference, St. Louis, MO, 9-13 July.

Dieringer, G. and **L. Cabrera R.** 2006. Floral thermogenesis and insect visitation to sympatric populations of *Arisaema triphyllum* and *A. dracontium* (Araceae). Poster presentation. AIBS Annual Meeting, Washington, D.C., 24-25 May.

Dieringer, G. and **L. Cabrera R.** 2003. Variation in floral traits of cloud forest plants along a moisture gradient. Poster presentation. Southwestern Association of Naturalists 50<sup>th</sup> Anniversary Meeting, Norman, OK, 17-19 April.

**Cabrera, R., L.** 1999. Some anatomical features on the cypsela of the genus *Acourtia* (Nassauviinae, Mutisieae, Asteraceae) and their taxonomic implications. Poster presentation. XVI International Botanical Congress, St. Louis, MO, 1-7 August.

Dieringer, G. and **L. Cabrera R.** 1989. Pollination ecology and stigma longevity of *Liatris mucronata* DC (Compositae). Poster presentation. AIBS Annual Meeting, Toronto, Canada, 6-10 August.

## Translations

- 1983 | Nee, M. Casuarinaceae. Flora de Veracruz. Fascículo 27 INIREB, Veracruz, México
- 1983 | Taylor, K. R. Pedaliaceae. Flora de Veracruz. Fascículo 34 INIREB, Veracruz, México
- 1984 | Nee, M. Cunoniaceae. Flora de Veracruz. Fascículo 39 INIREB, Veracruz, México
- 1984 | \_\_\_\_\_. Salicaceae. Flora de Veracruz. Fascículo 34 INIREB, Veracruz, México
- 1984 | Nevling, L. I., Jr. and K. Barringer. Thymelaeaceae, Flora de Veracruz. Fascículo 59 INIREB, Veracruz, México
- 1985 | Nee, M. Molluginaceae. Flora de Veracruz. Fascículo 43 INIREB, Veracruz, México

1986 | \_\_\_\_\_ . Nyssaceae. Flora de Veracruz. Fascículo 52 INIREB, Veracruz, México

1988 | \_\_\_\_\_ . Proteaceae. Flora de Veracruz. Fascículo 56 INIREB, Veracruz, México

## Educational Materials

| **Cabrera R., L.** and G. Dieringer. 2023. *Wildflowers of Northwest Missouri*. Poster. Upland Prairie Botanical Center, Maryville, MO.

| Dieringer, G. and **L. Cabrera R.** 1996. *A manual for the study of pollination ecology at field stations*. Western Illinois University, Macomb, IL.

## Professional Publications

| 24. Dieringer, G. and **L. Cabrera Rodríguez.** 2023. Bee diversity and patterns of flower visitation in the genus *Agalinis* (Orobanchaceae) in North America. *Arthropod-Plant Interactions* <https://doi.org/10.1007/s11829-023-09999-0>. <https://rdcu.be/dj9OW> IF: 1.7

| 23. Dieringer, G. and **L. Cabrera R.** 2022. Phenotypic selection on staminal trichomes of *Agalinis auriculata* (Orobanchaceae) in relation to pollen transfer by bumble bees. *International Journal of Plant Sciences* 183(9): 719-728. <https://doi.org/10.1086/722295>. IF: 2.6

| 22. Dieringer, G. and **L. Cabrera R.** 2022. Stamen dimorphism, bee visitation, and pollen removal in three species of *Agalinis* (Orobanchaceae). *Botany* 100(4): 377-386. doi: 10.1139/cjb-2021-0110. IF: 1.32

| 21. Pruski, J. F. and **L. Cabrera R.** 2018. *Acourtia* In: Asteraceae. Compositae, nom. alt. Pp. 1–608. In: G. Davidse, M. Sousa S., S. Knapp & F. Chiang (eds.), *Flora Mesoamericana*, vol. 5, part 2. Missouri Botanical Garden Press, St. Louis. (LOC 97156103). IF: Contribution by invitation only

| 20. **Cabrera R., L.** and J. Rzedowski. 2018. Familia Compositae, Tribu Gochnatieae. Fascículo 204. Flora del Bajío y de Regiones Adyacentes, Instituto de Ecología, A.C., Centro Regional del Bajío, Pátzcuaro, Michoacán, México. IF: Contribution by invitation only

| 19. Dieringer, G. and **L. Cabrera R.** 2017. Pollination and reproductive biology in a hill prairie population of *Nothocalais cuspidata* (Asteraceae: Cichorieae). *American Midland Naturalist* 177: 289-298. doi: 10.1674/0003-0031-177.2.289. IF: 0.73

18. Dieringer, G., **L. Cabrera R.**, and M. Mottaleb. 2014. Ecological relationship between floral thermogenesis and pollination in *Nelumbo lutea* (Nelumbonaceae). *American Journal of Botany* 101: 357-364. doi: 10.3732/ajb.1300370. IF: 2.603
17. Dieringer, G., **L. Cabrera R.**, and J. García-Franco. 2005. Polinización en el Bosque Mesófilo, pp. 158-171. In: *Historia Natural de la Reserva de la Biosfera El Cielo, Tamaulipas, México*. G. Sanchez, P. Reyes-Castillo, and R. Dirzo (eds.), Instituto de Ecología y Alimentos, Universidad Autónoma de Tamaulipas, Tamaulipas, México. Printed in Hong Kong. IF: Contribution by invitation only
16. **Cabrera R., L.** and G. L. Nesom. 2004. A new species of *Chaptalia* (Asteraceae: Mutiseae) from Mexico and rediscovery of *Chaptalia mexicana*. *Sida* 20(4): 1363-1369. IF: 0.25
15. **Cabrera R., L.** and G. Dieringer. 2003. Pollen structure of *Acourtia* (Asteraceae), new findings, and some taxonomic considerations. *International Journal of Plant Sciences*. 164: 287-294. IF: 1.53
14. Dieringer, G. and L. Cabrera R. 2002. The interaction between pollinator size and the bristle staminode of *Penstemon digitalis* (Scrophulariaceae). *American Journal of Botany* 89: 991-997. IF: 2.696
13. **Cabrera R., L.** 2002. Cypselas development in *Acourtia* (Mutiseae, Nassauviinae, Asteraceae) and its taxonomic implications. *International Journal of Plant Sciences* 163(2): 227-233. IF: 1.53
12. **Cabrera R., L.** 2001. *Acourtia* (Asteraceae): Six new species and a historical account of *Acourtia mexicana*. *Brittonia* 53: 416-429. IF: 0.23
11. Dieringer, G. and **L. Cabrera R.** 2001. Pollination ecology of bristle staminodia in *Penstemon digitalis* (Scrophulariaceae) and *Jacaranda acutifolia* (Bignoniaceae). *Biotam* 12: 31-36.
10. Dieringer, G. and **L. Cabrera R.** 2000. A comparison of size and sexual expression in populations of *Arisaema macrospatum* Benth. and *A. dracontium* (L.) Schott (Araceae). *Aroideana* 23: 31-35.
9. Dieringer, G., **L. Cabrera R.**, M. Lara, L. Loya, and P. Reyes-Castillo. 1999. Beetle pollination and floral thermogenicity in *Magnolia tamaulipana* (Magnoliaceae). *International Journal of Plant Sciences* 160: 64-71.
8. Dieringer, G., P. Reyes-Castillo, M. Lara, **L. Cabrera R.**, L. Loya. 1998. Endothermy and floral utilization of *Cyclocephala caelestis* (Coleoptera,



- Scarabaeoidea, Melolonthidae): a cloud forest endemic beetle. *Acta Zoologica Mexicana*. 73: 145-153.
7. Dieringer, G. and **L. Cabrera R.** 1994. Sexual selection of anther trichomes and sexual dimorphism in *Ibervillea lindheimeri* (Cucurbitaceae: Melothrieae). *American Journal of Botany* 81: 111-118.
6. **Cabrera R., L.** 1992. Five additions to the genus *Acourtia* (Asteraceae: Mutisieae). *Acta Botanica Mexicana* 20: 29-37.
5. **Cabrera R., L.** and G. Dieringer. 1992. Reproductive biology of a population of *Acourtia runcinata* (Asteraceae: Mutisieae) at the northeastern limit of its range. *American Midland Naturalist* 128: 83-88.
4. **Cabrera R., L.** 1990. A new species of *Acourtia* (Asteraceae: Mutisieae) from Southern Mexico. *Sida* 14(2): 141-144.
3. **Cabrera R., L.** 1989. A new species of *Acourtia* (Asteraceae: Mutisieae) from Chihuahua, Mexico. *Sida* 13(4): 419-421.
2. **Cabrera R., L.** and J. L. Villasenor. 1987. Revisión bibliográfica sobre el conocimiento de la familia Compositae en México. *Biotica* 12(2): 131-147.
1. **Cabrera R., L.** 1985. Aceraceae. *Flora de Veracruz*, Fascículo 46. INIREB, Veracruz, México.