

Current status of populations of *Magnolia
rzedowskiana* A. Vázquez, R. Domínguez & R. Pedraza
(Magnoliaceae) in the Sierra Madre Oriental,
Mexico

Marisol Gutiérrez-Lozano, Arturo Sánchez-González & Pablo Octavio Aguilar

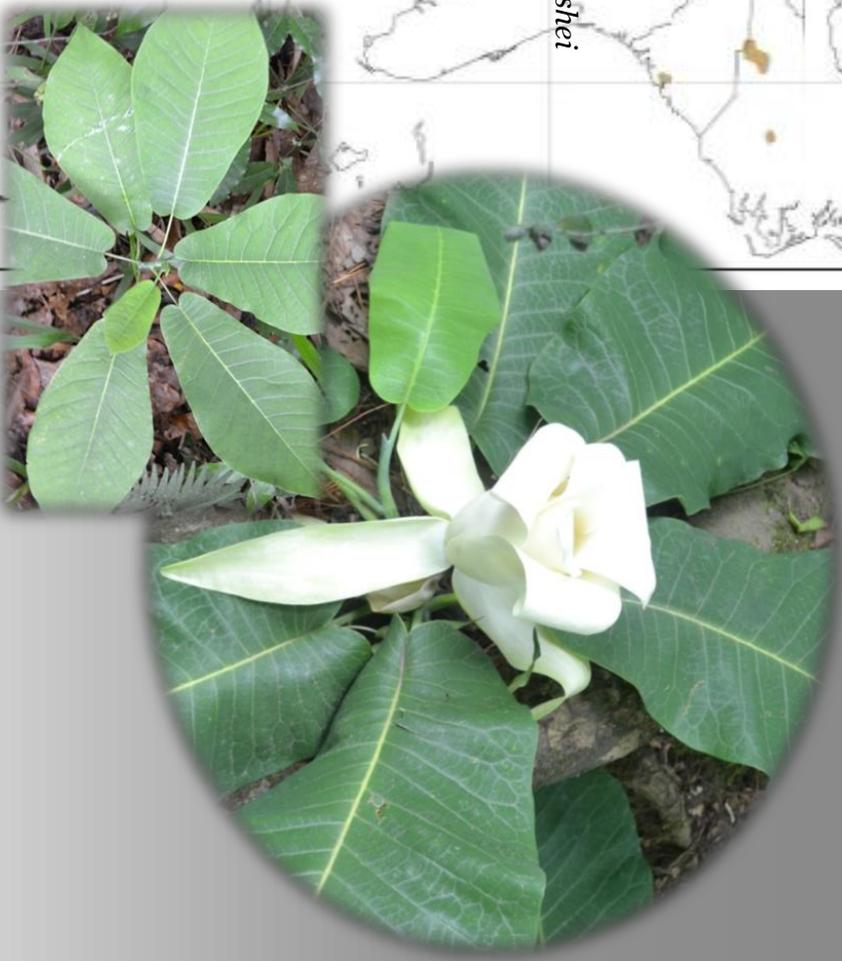
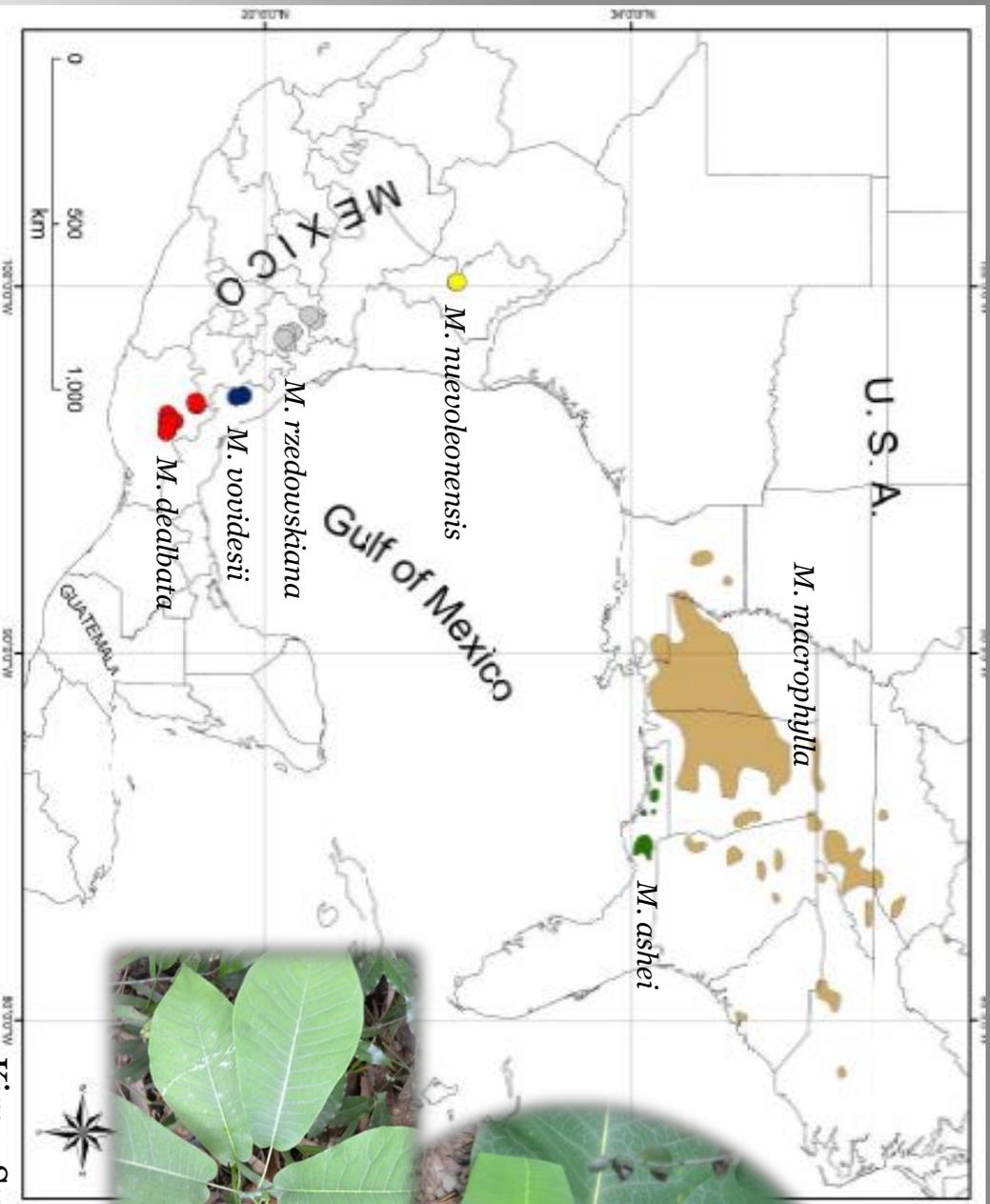
*Centro de Investigaciones Biológicas, Universidad
Autónoma del Estado de Hidalgo, México*



Diciembre, 2016

Magnoliaceae

- ✓ 220 sp in the planet
- ✓ Magnolia: 80 sp/12 sections
- ✓ Macrophylla: leaves deciduous, petals (purple color)



Names comuns

✓ *Magnolia rzedowskiana*



✓ Floxóchitl (“corn flower”)

✓ Yoloxóchitl (Hidalgo)



✓ Wide leaves (Querétaro)



✓ Papancha (San Luis Potosí)



M. rzedouskiana



- ✓ Tree: 8-25 m
- ✓ Pattern helical dystopic

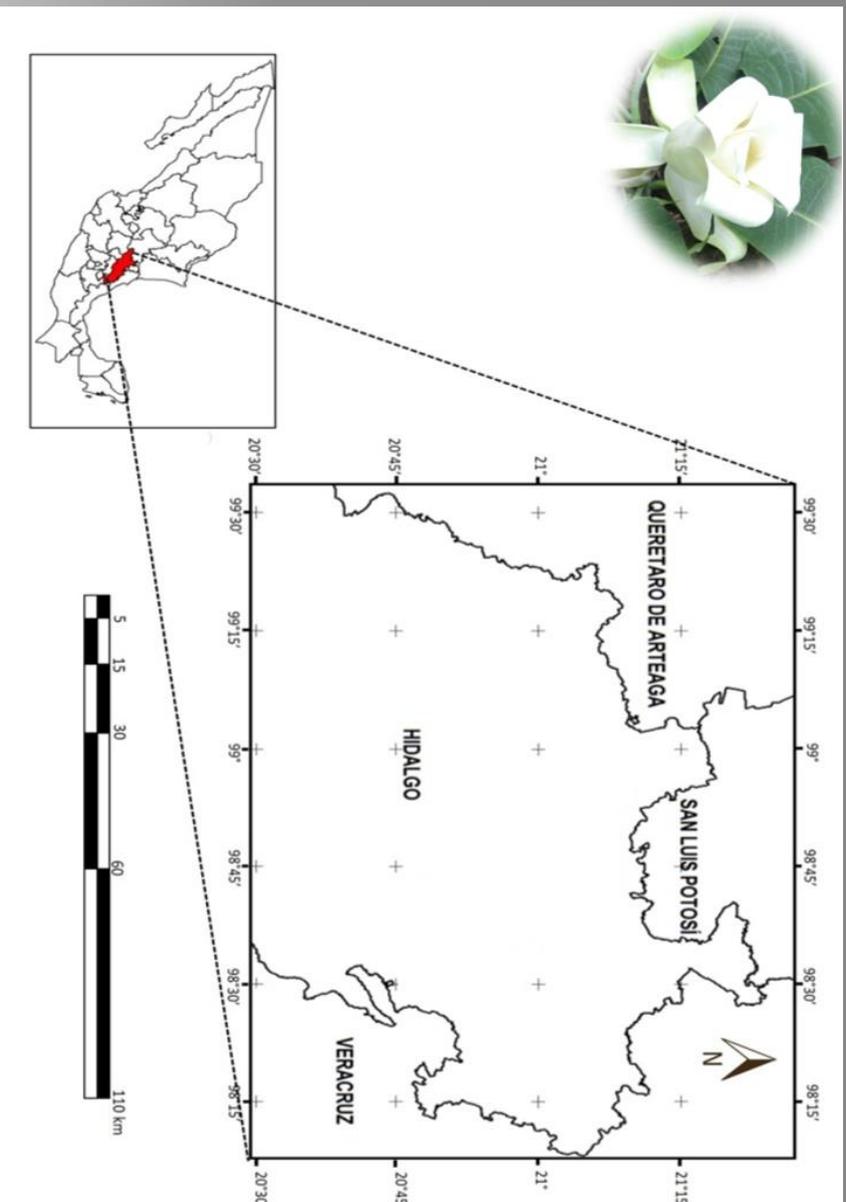


- ✓ Petals
- ✓ < number of stamens and carpels
- ✓ < small fruits

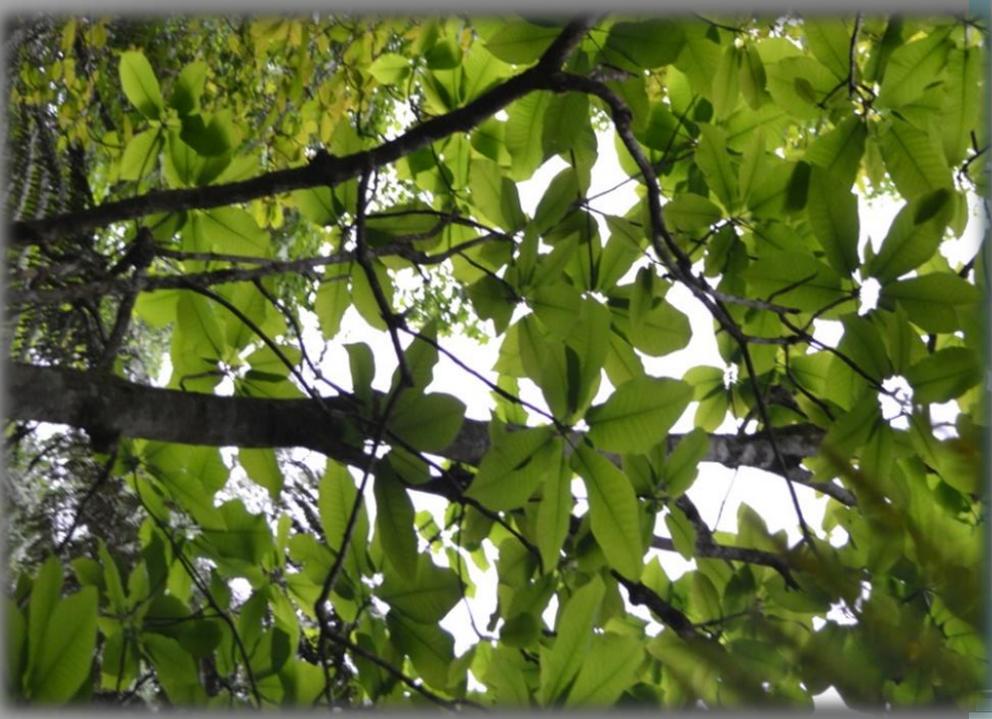
Phenology: march-october

Distribution

✓ Endemic species



✓ Cloud forest (BMM)



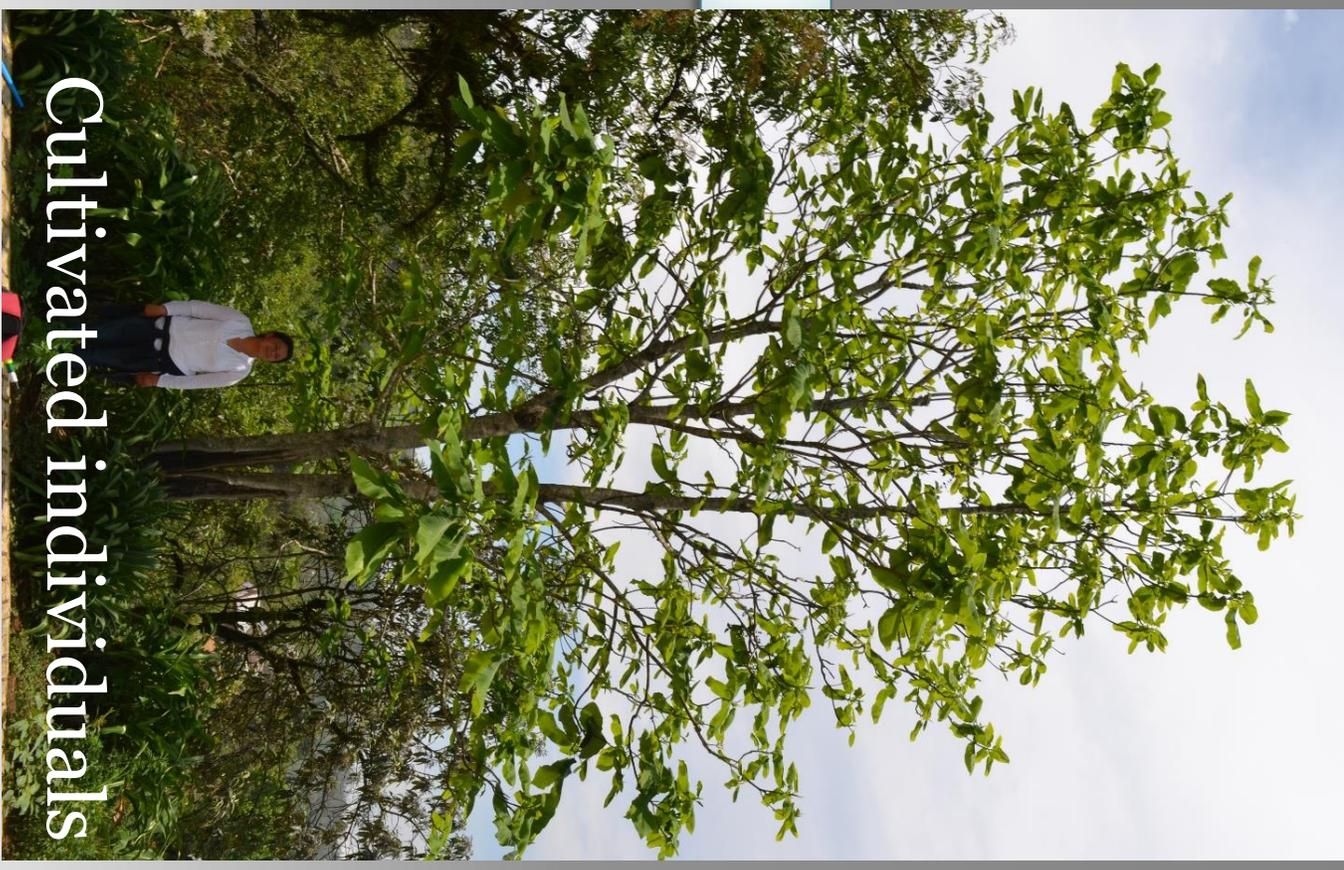
✓ BQL, BCP

M. rzedowskiana



Populations

VS



Cultivated individuals

Phenology

State	January	February	March	April	May	June	July	August	September	October	November	December
Hidalgo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Veracruz	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
San Luis Potosí	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Querétaro	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



✓ = Leaves production



✓ = Flowers production



✓ = Fruit formation



✓ = Fruit ripening



* = Fall of the trees

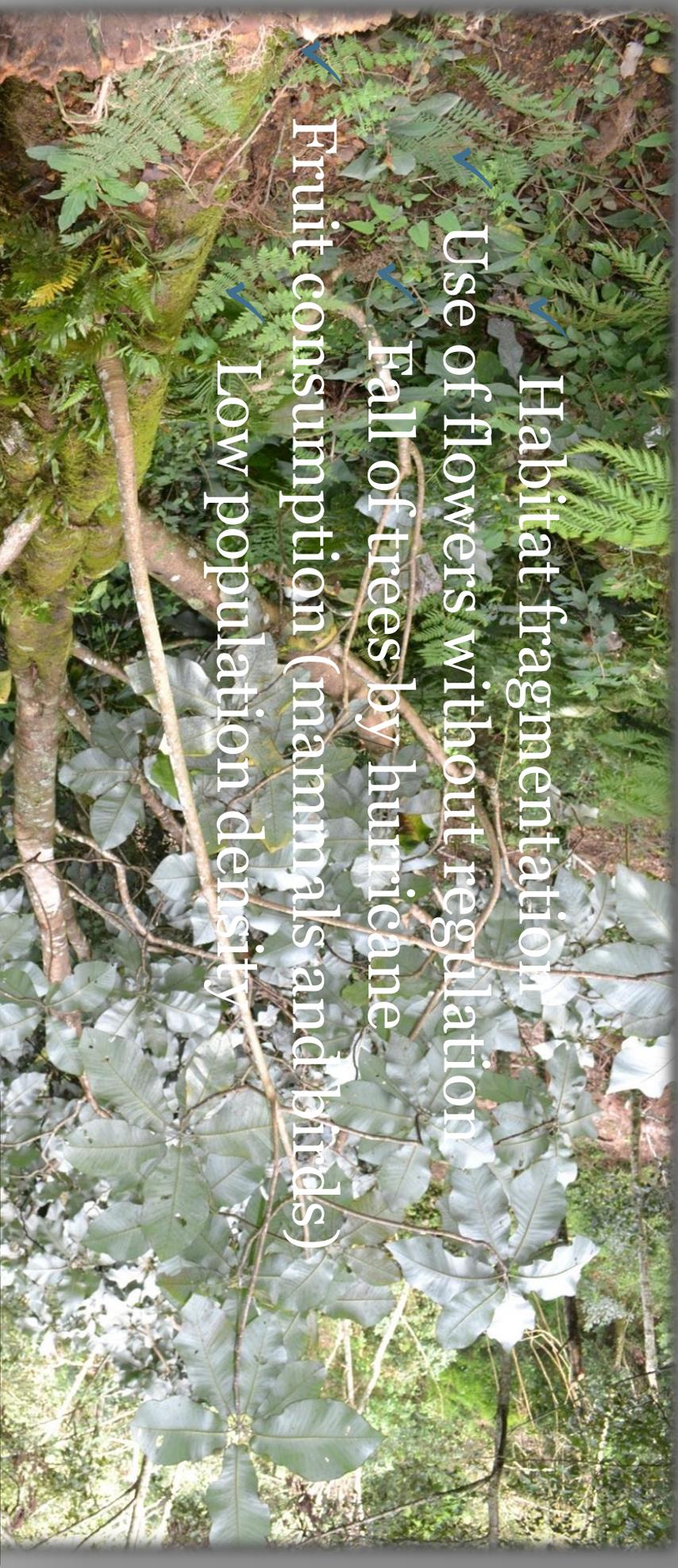


o = Fruit predation



Problems of *M. rzedowskiana*

- ✓ Habitat fragmentation
- ✓ Use of flowers without regulation
- ✓ Fall of trees by hurricane
- ✓ Fruit consumption (mammals and birds)
- ✓ Low population density



Currently density of the populations

State	Density of the observed population
Hidalgo	300
Querétaro	Maybe thousands*
San Luis Potosí	150
Veracruz	50

* Access restricted by authorities



✓ **Wide variation in the morphology (leaves and flowers)**

Importance

- ✓ Value economic and traditional medicine



\$5-50 MXN



Importance

✓ Propagation

✓ The people of the community (Hgo)



Conservation

Acta Botanica Mexicana 112: 19-36 (2015)

MAGNOLIA RZEDOWSKIANA (MAGNOLIACEAE), UNA ESPECIE NUEVA DE LA SECCIÓN *MACROPHYLLA* DE LA PARTE CENTRAL DE LA SIERRA MADRE ORIENTAL, MÉXICO

JOSÉ ANTONIO VÁZQUEZ-GARCÍA^{1,2}, REYNA DOMÍNGUEZ-YESCAS^{2,3}, ROBERTO PEDRAZA-RUIZ⁴, ARTURO SÁNCHEZ-GONZÁLEZ⁵ Y MIGUEL ÁNGEL MUÑOZ-CASTRO^{2,6}

✓ NOM-059-SEMAR/NAT-2010



✓ IUCN

“critically endangered”

Thanks!

