FIELDIANA: BOTANY

A Continuation of the
BOTANICAL SERIES
of
FIELD MUSEUM OF NATURAL HISTORY

VOLUME 32
# TABLE OF CONTENTS

1. A New Guatemalan *Spigelia*. By Dorothy N. Gibson .......................... 1
4. Tropical American Plants, X. By Louis O. Williams ....................... 35
5. Two New Guatemalan Tournefortias. By Dorothy N. Gibson ................. 65
6. A New Member of *Morganella*. By Patricio Ponce de Leon ................. 69
7. A New *Odontoglossum* from Nicaragua. By Alfonso H. Heller .......... 73
8. Studies in the Palm Genus *Syagrus* Mart. II. By S. F. Glassman ........ 77
10. A Conspectus of the Palm Genus *Butia* Becc. By S. F. Glassman ....... 127
11. Studies in American Plants, II. By Dorothy N. Gibson ..................... 173
12. Tropical American Plants, XI. By Louis O. Williams ..................... 179
14. An Overlooked Genus of the Scrophulariaceae. By Louis O. Williams ... 211
15. A Synopsis of the Palm Genus *Syagrus* Mart. By S. F. Glassman ........ 215
16. A New Hybrid in the Palm Genus *Syagrus* Mart. By S. F. Glassman .... 241
A NEW GUATEMALAN *SPIGELIA*
DOROTHY N. GIBSON

THREE NEW NICARAGUAN EPIDENDRUMS
ALFONSO H. HELLER

*SYAGRUS OLERACEA* (MART.) BECC. AND CLOSELY RELATED TAXA
S. F. GLASSMAN

TROPICAL AMERICAN PLANTS, X
LOUIS O. WILLIAMS

FIELDIANA: BOTANY
VOLUME 32, NUMBERS 1, 2, 3, 4
Published by
FIELD MUSEUM OF NATURAL HISTORY
AUGUST 19, 1968
TWO NEW GUATEMALAN TOURNEOFORTIAS
DOROTHY N. GIBSON

A NEW MEMBER OF MORGANELLA
PATRICIO PONCE DE LEON

A NEW ODONTOGLOSSUM FROM NICARAGUA
ALFONSO H. HELLER

STUDIES IN THE PALM GENUS SYAGRUS MART. II
S. F. GLASSMAN

FIELDIANA: BOTANY
VOLUME 32, NUMBERS 5, 6, 7, 8
Published by
FIELD MUSEUM OF NATURAL HISTORY
AUGUST 11, 1969
TWO NEW GUATEMALAN TOURNEFORTIAS
DOROTHY N. GIBSON
Supervisor of the Herbarium
Field Museum of Natural History

A NEW MEMBER OF MORGANELLA
PATRICIO PONCE DE LEON
Assistant Curator, Cryptogamic Herbarium
Field Museum of Natural History

A NEW ODONTOGLOSSUM FROM NICARAGUA
ALFONSO H. HELLER
Associate, Field Museum of Natural History

STUDIES IN THE PALM GENUS SYAGRUS MART. II
S. F. GLASSMAN
Research Associate, Palms
Field Museum of Natural History
and
University of Illinois, Chicago Circle

FIELDIANA: BOTANY
VOLUME 32, NUMBERS 5, 6, 7, 8
Published by
FIELD MUSEUM OF NATURAL HISTORY
AUGUST 11, 1969
Printed with the Assistance of
The Frederick R. and Abby K. Babcock Fund
CONTENTS

Two New Guatemalan Tournefortias by Dorothy N. Gibson .......... 65
A New Member of Morganella by Patricio Ponce de Leon .......... 69
A New Odontoglossum from Nicaragua by Alfonso H. Heller .......... 71
Studies in the Palm Genus Syagrus Mart. II by S. F. Glassman .......... 75
Two New Guatemalan Tournefortias

DOROTHY N. GIBSON
SUPERVISOR OF THE HERBARIUM
FIELD MUSEUM OF NATURAL HISTORY

During studies of the family Boraginaceae for the “Flora of Guatemala,” the following new Tournefortias were found:

Tournefortia elongata D. Gibson, *sp. nov.*

Frutex vel arbor parva usque ad 8 m.; folia elliptico-oblonga vel oblongo-ovata, longe-acuminata, ad basim longe-attenuata, dense hirsuta vel breviter hispida; inflorescentia laxa, cyma dichotoma, longe pedunculata; sepala linearia vel lineari-lanceolata, acuminata, erecta, 6–9 mm. longa, hispida; corollae cylindrical, tubi 8–9 mm. longi, lobi triangulari, acuti; styli elongati 6–7 mm., gynoeceia ad 9 mm.; fructi globoso-ovoidei, albi.

Shrubs or small trees to 8 m. tall, the branchlets densely brown-hirsute or hirsute-tomentose; leaves on stout, tomentose petioles mostly 0.5–4 cm. long, the blades elliptic-oblong to oblong-ovate, usually 6–25 cm. long, 2–9 cm. wide, long acuminate, long-attenuate to the base, densely hirsute or short-hispid on both surfaces; inflorescences open, lax, dichotomous helicoid cymes, long-pedunculate, the flowers secund; sepals linear to linear-lanceolate, attenuate, 6–9 mm. long, erect, usually densely hispidulous; corolla green or greenish-yellow, the tube cylindric, hispidual outside, 8–9 mm. long, the lobes triangular, acute, 2.5–3.5 mm. long, spreading or somewhat recurved; stamens subsessile in corolla throat, anthers ca. 2 mm. long; style elongated, 6–7 mm. long, the entire gynoeicum to 9 mm. long, always equalling or exceeding the calyx; fruit white, glabrous, globose-ovoid, ca. 1 cm. in diameter.

Guatemala: on south-facing slopes of Volcán Santa Clara, Dept. Sololá, 2,100–3,000 m., June 2, 1942, Steyermark 47029 (type, F; GH); Chimaltenango, Skutch 308 and 382; Escuintla, Aguilar 1615; Guatemala, Aguilar 589; Jalapa, Steyermark 32635; Quezaltenango, Roe, Roe & Mori 702, Standley 83532, Steyermark 34951; San Marcos, Steyermark 36748; Totonicapan, Molina, Burger, & Wallenta 16365.

Tournefortia elongata closely resembles *T. johnstonii* Standley, of Costa Rica. However, the gynoeicum of *T. johnstonii* at anthesis is only 5–6 mm. long, the style never equalling or exceeding the calyx, the sepals are narrowly linear, and the corolla lobes are subulate and acuminate.
FIG. 1. *Tournefortia elongata*. A, habit, half natural size; B, calyx opened to show gynoecium, $\times 3$; C, corolla opened to show stamens, $\times 3$. 
FIG. 2. *Tournefortia longiloba*. A, habit, half natural size; B, corolla, × 3; C, calyx opened to show gynoecium, × 5.
**Tournefortia longiloba** D. Gibson, *sp. nov.*

Frutex usque ad 5 m. altus; folia lanceolato-oblonga vel lanceolato-elliptica, acuta vel acuminata, ad basim attenuata plurumque, supra puberula, infra tomentosa vel velutina; inflorescentia multiflora, panicula composita dichotoma paucimultiramosa; sepala ovato-lanceolata vel lanceolata, acuta, 3–5 mm. longa, hispidula vel hirsutula; corollae cylindraceae, tubi ca. 5 mm. longi, lobi elongati, triangulari, acuminati, 3–4.5 mm. longi; fructi globoso-ovoidei, albi.

Shrubs to 5 m. tall; leaves entire, on stout, tomentose petioles 1–3.5 cm. long the blades lance-oblong or lance-elliptic, mostly 8–18 cm. long, 3–5 cm. wide, acute to acuminate, usually attenuate to the base, rarely rounded to obtuse and abruptly deciduous, usually puberulous above, tomentose to velutinous below (rarely glabrate), with 8–14 pairs of lateral nerves; inflorescences paniculate, of few to many dichotomous, helicoid cymes, many-flowered, the flowers secund, often placed at intervals of 5–6 mm. on the cincinnus, sessile or on pedicels 1–6 mm. long; sepals ovate-lanceolate to lanceolate, acute, hispidulous to hirsutulous, 3–5 mm. long; corolla white, the tube cylindrical, hirsutulous on the outside, ca. 5 mm. long, the lobes narrowly triangular, acuminate, spreading to recurved, 3–4.5 mm. long; stamens included, sessile or subsessile, inserted in tube at a point just above the middle and ca. 3 mm. above the base, anthers 1.5–2 mm. long; ovary subglobose, the style short, not exceeding the sepals at anthesis, the stigma annular below the apex of the style; mature fruits globose-ovoid, white, glabrous, 7–9 mm. long, 5–6 mm. in diameter when dry; seeds 4.

Guatemala: on steep, moist slopes with *Quercus* and *Pinus*, along road to Huehuetenango, 5 miles south of San Juan Ixcoy, Dept. Huehuetenango, alt. 9,200 ft., Feb. 1965, Breedlove 8564 (type, F; DS); Huehuetenango, Breedlove 11494, Steyermark 49079 and 50093; El Quiché, Heyde & Lux 2907.

Mexico: Breedlove 9316.

Although our plant superficially resembles *T. acutiflora* Mart. & Gal., the style of *T. acutiflora* is elongated, considerably surpassing the sepals. Further, the corolla lobes of *T. acutiflora*, although they are also linear-lanceolate and attenuate, are only 2.5–3 mm. long, and the corolla tube is longer (6–7 mm.) and more narrow than that of our species.

*Tournefortia longiloba* may be more closely related to *T. subspicata* Donn.-Sm. of Costa Rica, which also has a short style and long corolla lobes. However, *T. subspicata* has a nearly glabrous calyx, a longer corolla tube (6–7 mm.) with appressed hairs, slightly longer anthers (2.5 mm.), and leaves with only sparse pubescence beneath.
Publications 1071, 1072, 1073, and 1074