



JOURNAL OF THE

BOTANICAL
RESEARCH
INSTITUTE OF
TEXAS



VOLUME 11, NUMBER 1, 24 JULY 2017

TABLE OF CONTENTS

SYSTEMATICS

- Artemisia estesii** (Asteraceae), a new diploid species of the *Artemisia ludoviciana* complex in the Pacific Northwest (U.S.A.)

KENTON L. CHAMBERS

1

- Revised recognition of a high Sierran **Potentilla** (Rosaceae) as **Potentilla amicarum**

BARBARA ERTTER

11

- Notes on **Eritrichium** (Boraginaceae) in North America III. Three new species of **Eritrichium**

DAVID F. MURRAY

19

- Two innovations in Mexican Malvaceae

LAURENCE J. DORR

25

- Three new species of **Calathea** (Marantaceae) endemic to Colombia

HELEN KENNEDY

29

- A new species of **Cyperus** section **Incurvi** (Cyperaceae) from Venezuela

GORDON C. TUCKER

39

- Novelties in neotropical Dilleniaceae

GERARDO A. AYMARD C.

45

- Molecular phylogenetic analysis of the north-temperate Labrador teas

(Ericaceae: **Rhododendron** subsect. **Ledum**) suggests a complex genetic history

ANDREW HART, KATHLEEN KRON, AND EMILY GILLESPIE

53

- Variation in **Linnaea borealis** (Linnaeaceae) across North America and Greenland

PETER F. ZIKA AND GORDON C. TUCKER

67

- El género **Lonicera** (Caprifoliaceae) en México y Guatemala

JOSÉ A. VILLARREAL QUINTANILLA, ALMA D. RUIZ ACEVEDO, EDUARDO ESTRADA CASTILLÓN,

DIANA JAÑO DE RODRÍGUEZ, AND JORGE MENDEZ GONZÁLEZ

81

- A brief biography of Wolfgang Wolf and typification of the plant names he published

CURTIS J. HANSEN

103

- Notes on vascular plant type collections of Cyrus G. Pringle in western United States

and Mexico, 1881–1884

117

KATHRYN MAUZ

- Schradera involucrata** is the correct name for **Spermacoce scandens** (Rubiaceae)

PIERO G. DELPRETE AND JOSEPH H. KIRKBIDE, JR.

121

DEVELOPMENT AND STRUCTURE

- Conifer tracheids resolve conflicting structural requirements: Data, hypotheses, questions

SHERWIN CARLQUIST

123

SUBSCRIBED



DOCUMENTED CHROMOSOME NUMBERS

Documented chromosome numbers 2017:1. Miscellaneous counts mostly from western Texas (U.S.A.), one each from New Mexico (U.S.A.) and Mexico

A. MICHAEL POWELL, SHIRLEY A. POWELL, AND CHRIS JACKSON

143

BOTANICAL HISTORY

Regulation of peyote (*Lophophora williamsii*: Cactaceae) in the U.S.A.: A historical victory of religion and politics over science and medicine

MARTIN TERRY AND KEEPER TROUT

147

FLORISTICS, ECOLOGY, AND CONSERVATION

Additions to the vascular flora of Costa Rica: Four new records from the Sabanas Miravalles

JOSÉ ESTEBAN JIMÉNEZ

157

First collection of *Miconia turquinensis* (Melastomataceae: Miconieae) with flowers, and comparison with *M. remotiflora*, a putative close relative

WALTER S. JUDD, ELDIS R. BÉCQUER, AND LUCAS C. MAJURE

161

Two new records of *Digitaria* sect. *Digitaria* (Poaceae) from Venezuela and the New World

SHINGO NOZAWA, JOSÉ R. GRANDE ALLENDE, AND YASUSHI IBARAGI

169

Floristics of flowering plants from the understory of Atlantic remnants in Bahia, Brazil

RODRIGO L. BORGES, PATRÍCIA A. FERREIRA, BLANDINA F. VIANA, MARIA L.S. GUEDES, AND NÁDIA ROQUE

175

New records and range extensions for *Rosa* (Rosaceae) in North America

WALTER H. LEWIS AND MEMORY ELVIN-LEWIS

185

Endemic plants of the Central Grassland of North America: Distribution, ecology, and conservation status

JAMES H. LOCKLEAR

193

Vascular flora of the South San Juan Mountains (Colorado, U.S.A.): A floristic inventory of two southern Rocky Mountains slopes

MATHEW THOMAS SHARPLES

235

The genus *Bryhnia* and *Bryhnia graminicolor* (Bryophyta: Brachytheciaceae), new to the bryophyte flora of Texas, U.S.A.

DALE A. KRUSE

267

Book Reviews, Notices, and Announcements 10, 24, 38, 44, 52, 66, 80, 102, 142, 168, 174, 192, 274

INDEX to new names and new combinations in *J. Bot. Res. Inst. Texas* 11(1), 2017

Artemisia estesii K.L. Chambers, sp. nov.—2

Calathea barryi H. Kenn., sp. nov.—31

Calathea neurophylla H. Kenn., sp. nov.—29

Calathea velutinifolia H. Kenn., sp. nov.—34

Cyperus fedoniae G.C. Tucker, sp. nov.—39

Doliocarpus hilarianus (Kubitzki) Aymard, comb. et stat. nov.—48

Doliocarpus putumayensis Aymard, sp. nov.—46

Eritrichium arenosum D.F. Murray, sp. nov.—19

Eritrichium boreale D.F. Murray, sp. nov.—21

Eritrichium grandiflorum D.F. Murray, sp. nov.—22

Potentilla amicarum Ertter, sp. nov.—12

Reevesia clarkii (Monach. & Moldenke) Solheim ex Dorr, comb. nov.—26

TABLE OF CONTENTS

SYSTEMATICS

Stenanthium leimanthoides and **S. densum** (Melanthiaceae) revisited, with the description of two new species

BRUCE A. SORRIE AND ALAN S. WEAKLEY

275

A new combination in **Penstemon** (Plantaginaceae)

CRAIG C. FREEMAN

287

New combinations in Nearctic endemic **Euphrasia** (Orobanchaceae)

GALINA GUSSAROVA

SUBSCRIBED

289

New combinations, rank changes, and nomenclatural and taxonomic comments in the vascular flora of the southeastern United States. II

ALAN S. WEAKLEY, DERICK B. POINDEXTER, RICHARD J. LEBLOND, BRUCE A. SORRIE, CASSANDRA H. KARLSSON, PARKER J. WILLIAMS, EDWIN L. BRIDGES, STEVE L. ORZELL, BRIAN R. KEENER, ANDREA WEEKS, RICHARD D. NOYES, MARÍA FLORES-CRUZ, JAMES T. DIGGS, GEORGE D. GANN, AND AARON J. FLODEN



327

Una especie nueva de **Tachia** (Gentianaceae) de Isla del Coco, Costa Rica

JOAQUÍN SÁNCHEZ-GONZÁLEZ AND ALEXANDER RODRÍGUEZ

Miconia vincentiana (Melastomataceae: Miconieae), a curious endemic to St. Vincent,

Lesser Antilles

WALTER S. JUDD AND GRETCHEN M. IONTA

335

Morphology corroborates DNA sequence data in the species-level recognition of

Gaultheria trichophylla var. **tetracme** (Ericaceae)

PETER W. FRITSCH, LU LU, MING-YING ZHANG, HONG WANG, AND DE-ZHU LI

343

Polyplody and genome size variation in **Phlox nana** (Polemoniaceae) from the Pecos Plains of New Mexico and the Davis Mountains of West Texas, U.S.A.

JAMIE LADNER, MARK H. MAYFIELD, L. ALAN PRATHER, AND CAROLYN J. FERGUSON

351

Arceuthobium tsugense (Viscaceae): Four subspecies with contrasting morphologies and host distributions

ROBERT L. MATHIASEN AND SHAWN C. KENALEY

363

Struthanthus (Loranthaceae) variation in Venezuela: A numerical approach

ANIUKA KAZANDJIÁN

391

The correct original spelling of Bartram's *Ixia* (**Ixia caelestina**: Iridaceae)

ALAN R. FRANCK AND ELENI H. MANOLARAKI

409

Taxonomy of **Dichanthelium hirstii** (Poaceae), a very rare and disjunct witch-grass of the eastern U.S.

RICHARD J. LEBLOND, ROBERT F.C. NACZI, ALAN S. WEAKLEY, KATHLEEN S. WALZ, ROBERT W. FRECKMANN, AND WILLIAM McAVOY

413

Erratum: A brief biography of Wolfgang Wolf and typification of the plant names he published

CURTIS J. HANSEN

419

DEVELOPMENT AND STRUCTURE

- Procambial and cambial variants in **Serjania** and **Urvillea** species (Sapindaceae: Paullinieae)
WILLIAN ADRIANO LIRA LOPEZ, LUIZ ANTONIO DE SOUZA, AND ODAIR JOSE GARCIA DE ALMEIDA 421

CHROMOSOME NUMBERS

- The worldwide significance of karyotypic variation in **Rosa acicularis** (Rosaceae)
WALTER H. LEWIS AND MEMORY ELVIN-Lewis 433

FLORISTICS, ECOLOGY, AND CONSERVATION

- Diplodia** and **Dothiorella** species (Botryosphaeriaceae: Ascomycota) from Uzbekistan
YUSUFJON GAFFOROV AND DAVRON RAKHIMOV 455

- Conservation assessment of Playa Delfín Rainforest Reserve and Research Station, Costa Rica
RONALD L. JONES AND HUMBERTO JIMÉNEZ-SAA 469

- An annotated checklist of Atlantic Rainforest trees in southeastern Brazil, Tinguá
Biological Reserve, Rio de Janeiro
MARIANA DE A. IGUATEMY, FERNANDA F. NEGREIROS, HAROLDO C. LIMA, PABLO J.F.P. RODRIGUES,
MARIELA F.S. DE JESUS, DEBORAH HOTTZ, MAYSÁ S.C. LIMA, ELIANA RAMOS, SEBASTIÃO J. SILVA NETO,
ALEXANDRE QUINET, ADRIANA LOBÃO, MARCELO SOUZA, MASSIMO G. BOVINI,
SOLANGE DE V.A. PESSOA, BRUNO C. KURTZ, JOÃO M.A. BRAGA, AND CLAUDIA F. BARROS 479

- Knowledge of genetic diversity informs conservation of a rare, clonal wetland plant
Lilaeopsis schaffneriana subsp. **recurva** (Apiaceae)
SHANNON D. FEHLBERG 499

- Adlumia fungosa** (Fumariaceae), new to the flora of Louisiana, U.S.A.
CHARLES M. ALLEN 511

- Additional species for the Jemez Mountains, New Mexico, U.S.A.
C.F. KELLER, C.T. MARTIN, T.S. FOXX, AND N.R. GREINER 513

- Habranthus tubispathus** (Amaryllidaceae/Liliaceae), new to the flora of Mississippi, U.S.A.
PHILIP J. BARBOUR 523

- Phytogeographical relationships and analysis of the flora of South Texas Plains, U.S.A.
A.A. SAGHATELYAN 527

- An annotated vascular flora and floristic analysis of the southern half of the
Nature Conservancy Davis Mountains Preserve, Jeff Davis County, Texas, U.S.A.
JEFFREY JAMES KEELING 563

IN MEMORIAM

- In Memoriam: John Earl Averett (19 April 1943–1 January 2017)
A. MICHAEL POWELL 619

- In Memoriam: Shirley Caillet Dieterich Lusk (24 May 1925–29 April 2017)
MARY CURRY AND ALAN LUSK 629

- In Memoriam: Edwin (Ed) Burnell Smith (1 December 1936–28 January 2017)
KIMBERLY G. SMITH AND JOHNNIE L. GENTRY 639

Reviewers for Volume 11 (2017)—	645
Index to Volume 11 (2017)—	645
Titles of Articles with Authors—	645
Authors—	647
Botanical Names and Subjects—	648
New Names and Combinations—	651

Book Reviews, Notices, and Announcements 288, 326, 334, 342, 350, 408, 412, 418, 420, 468, 498, 526, 562, 628, 642

INDEX to new names and new combinations in *J. Bot. Res. Inst. Texas* 11(2), 2017

- Allium keeverae** D.B. Poind., Weakley, & P.J. Williams, sp. nov.—**294**
Clematis morefieldii Kral, sp. nov.—**320**
Dalea floridana (Rydb.) Diggs & Weakley, comb. & stat. nov.—**304**
Dichanthelium arenicoloides (Ashe) LeBlond, comb. nov.—**314**
Dichanthelium roanokense (Ashe) LeBlond, comb. nov.—**317**
Didymoglossum punctatum subsp. **floridanum** (Wess.Boer) Weakley & Gann, comb. nov.—**307**
Elymus hystrix var. **piedmontanus** D.B. Poind. & Weakley, var. nov.—**318**
Erigeron calcicola (J. Allison) D.B. Poind., B.R. Keener, & Noyes, comb. & stat. nov.—**298**
Erigeron dolomitica (J. Allison) D.B. Poind., B.R. Keener, & Noyes, comb. & stat. nov.—**298**
Euphrasia farlowii (B.L. Rob.) Gussarova, comb. & stat. nov.—**290**
Euphrasia oakesii var. **williamsii** (B.L. Rob.) Gussarova, comb. & stat. nov.—**289**
Gaultheria tetracme (Airy Shaw) PW. Fritsch & Lu Lu, comb. & stat. nov.—**344**
Liatris quadriflora (Chapm.) E.L. Bridges & Orzell, comb. & stat. nov.—**298**
Miconia vincentiana (Urb.) Judd & Lonta, comb. nov.—**336**
Mimosa floridana (Chapm.) Weakley & Flores-Cruz, comb. & stat. nov.—**305**
Monarda brevis (Fosberg & Artz) Floden, comb. nov.—**308**
Myzorrhiza riparia (L.T. Collins) Weakley, comb. nov.—**314**
Penstemon crandallii var. **glabrescens** (Pennell) C.C. Freeman, comb. nov.—**287**
Ripariosida Weakley & D.B. Poind., gen. nov.—**310**
Ripariosida hermaphrodita (L.) Weakley & D.B. Poind., comb. nov.—**310**
Stenanthium macrum Sorrie & Weakley, sp. nov.—**281**
Stenanthium tennesseense Sorrie & Weakley, sp. nov.—**278**
Tachia blancoi Al. Rodr. & J. Sánchez-Gonz., sp. nov.—**328**
Trilisa subtropicana (DeLaney, N. Bissett, & Weidenh.) E.L. Bridges & Orzell, comb. & stat. nov.—**300**