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AMERICAN JOURNAL OF Botany

June 2013 • Volume 100 • Number 6

FEATURING A SPECIAL SECTION:
ECOLOGICAL INTERACTIONS AND THE EVOLUTION OF PLANT MATING SYSTEMS

Cover Illustration: Tobacco hornworm caterpillar (*Manduca sexta*) feeding on horsenettle (*Solanum carolinense*). Horsenettle produces stellate trichomes and spines that act as structural defenses against herbivores such as *Manduca*. Kariyat et al. [Constitutive and herbivore-induced structural defenses are compromised by inbreeding in *Solanum carolinense* (Solanaceae), pp. 1014–1021 in this issue] demonstrate that constitutive and induced structural defenses against herbivores are negatively affected by inbreeding and that defense induction accrues a cost observed as delayed flowering. Inbreeding and outbreeding rates, pollinator availability, resource allocation to reproductive organs, hormonal regulation, and floral plasticity are some of the major driving forces in the evolution of plant mating systems as described in the Special Section “Ecological Interactions and the Evolution of Plant Mating Systems” of this issue. Photo credit: Rupesh R. Kariyat.

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June 2013 · Volume 100 · Number 6

TABLE OF CONTENTS

Special Section: Ecological Interactions and the Evolution of Plant Mating Systems

Following Darwin's trail: Interactions affecting the evolution of plant mating systems

RUPESH R. KARIYAT, JORDAN P. SINCLAIR, AND EDWARD M. GOLENBERG 999

Interactions of hybridization and mating systems: A case study in *Leptosiphon* (Polemoniaceae)

CAROL GOODWILLIE AND JENNIFER M. NESS 1002

Constitutive and herbivore-induced structural defenses are compromised by inbreeding in *Solanum carolinense* (Solanaceae)

RUPESH R. KARIYAT, CHRISTOPHER M. BALOGH, RYAN P. MORASKI, CONSUELO M. DE MORAES, MARK C. MESCHER, AND ANDREW G. STEPHENSON 1014

Hormonal interactions and gene regulation can link monoecy and environmental plasticity to the evolution of dioecy in plants

EDWARD M. GOLENBERG AND NICHOLAS W. WEST 1022

Consanguineous mating, specialization, and the environment: How multiple variable interactions affect the evolution of dioecy

JORDAN P. SINCLAIR, GLENN D. MAXWELL, AND D. CARL FREEMAN 1038

Developmental plasticity, genetic assimilation, and the evolutionary diversification of sexual expression in *Solanum*

PAMELA K. DIGGLE AND JILL S. MILLER 1050

Toward a predictive understanding of the fitness costs of heterospecific pollen receipt and its importance in co-flowering communities

TIA-LYNN ASHMAN AND GERARDO ARCEO-GÓMEZ 1061

Measure for measure: Comparing morphological and biomass traits for sex allocation in two gynodioecious species

ANN K. SAKAI, STEPHEN G. WELLER, DIANE R. CAMPBELL, THERESA M. CULLEY, AMY K. DUNBAR-WALLIS, AND ALLEN M. ANDRES 1071

Pollination and mating systems of Apodanthaceae and the distribution of reproductive traits in parasitic angiosperms

SIDONIE BELLOT AND SUSANNE S. RENNER 1083

Long-term effects of habitat fragmentation on mating patterns and gene flow of a tropical dry forest tree, *Ceiba aesculifolia* (Malvaceae: Bombacoideae)

MAURICIO QUESADA, YVONNE HERRERIAS-DIEGO, JORGE A. LOBO, GUMERSINDO SÁNCHEZ-MONTOYA, FERNANDO ROSAS, AND RAMIRO AGUILAR 1095

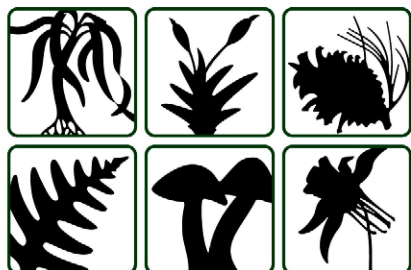
A multidimensional approach to understanding floral function and form

DAVID E. CARR 1102

Biomechanics

Characterizing microscale biological samples under tensile loading: Stress-strain behavior of cell wall fragment of onion outer epidermis

M. S. ZAMIL, HOJAE YI, M. A. HAQUE, AND VIRENDRA M. PURI 1105



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Table of Contents CONTINUED

Developmental Biology and Developmental Genetics

Precocious progression of tissue maturation instructs basipetal initiation of leaflets in *Chelidonium majus* subsp. *asiaticum* (Papaveraceae)

MOMOKO IKEUCHI, KIYOSHI TATEMATSU, TAKAHIRO YAMAGUCHI, KIYOTAKA OKADA,
AND HIROKAZU TSUKAYA 1116

Ecology

Seed dispersal of the Australian cycad *Macrozamia miquelii* (Zamiaceae):
Are cycads megafauna-dispersed “grove forming” plants?

JOHN A. HALL AND GIMME H. WALTER 1127

Spring and summer patterns in flowering onset, duration, and constancy
across a water-limited gradient

THERESA M. CRIMMINS, MICHAEL A. CRIMMINS, AND C. DAVID BERTELSEN 1137

Choices and consequences of oviposition by a pollinating seed predator,
Hadena ectypa (Noctuidae), on its host plant, *Silene stellata* (Caryophyllaceae)

ABIGAIL A. R. KULA, MICHELE R. DUDASH, AND CHARLES B. FENSTER 1148

A reevaluation of the use of rhizome scars to age plants of *Trillium erectum*
(Melanthiaceae)

STEVEN B. BROYLES, SARAH M. SMITH, TORI R. SMITH, AND JUSTIN R. KINDT 1155

Scales and drivers of local adaptation in *Brassica nigra* (Brassicaceae)
populations

ARMIN BISCHOFF AND BASILE HURALT 1162

Evolution and Phylogeny

The phylogeny of the European high mountain genus *Adenostyles*
(Asteraceae-Senecioneae) reveals that edaphic shifts coincide with
dispersal events

MARKUS S. DILLENBERGER AND JOACHIM W. KADEREIT 1171

Reproductive Biology

Forest tree pollen dispersal via the water cycle

CLAIRE G. WILLIAMS 1184

Systematics and Phylogeography

Strong genetic structure over the American continents and transoceanic
dispersal in the mangrove genus *Rhizophora* (Rhizophoraceae) revealed
by broad-scale nuclear and chloroplast DNA analysis

KOJI TAKAYAMA, MARIKO TAMURA, YOICHI TATEISHI, EDWARD L. WEBB,
AND TADASHI KAJITA 1191

Origins, genetic structure, and systematics of the narrow endemic peatmosses
(*Sphagnum*): *S. guwassanense* and *S. triseriporum* (Sphagnaceae)

A. JONATHAN SHAW, BLANKA SHAW, MATTHEW G. JOHNSON, MASANOBU HIGUCHI,
TOMOTSUGU ARIKAWA, TAKESHI UENO, AND NICOLAS DEVOS 1202

Brief Communication

Invasive congeners are unlikely to hybridize with native Hawaiian
Bidens (Asteraceae)

MATTHEW L. KNOPE, RICHARD J. PENDER, DANIEL J. CRAWFORD,
AND ANIA M. WIECZOREK 1221

Abbreviations

Miscellaneous: AFLP, amplified fragment length polymorphisms; a.s.l., above sea level; bp, base pair; BP, before present; BSA, bovine serum albumin; cpDNA, chloroplast DNA; CTAB, hexadecyltrimethylammonium bromide; cv., cultivar; ddH₂O, double-distilled water; dNTP, deoxyribonucleotide 5'-phosphate; Enzyme Commission; EDTA, ethylene diamine tetra-acetic acid; f. sp., forma specialis; indels, insertions and deletions; ITS, internal transcribed spacer; LM, light microscopy; mya, million years ago; PAGE, polyacrylamide gel electrophoresis; PCR, polymerase chain reaction; RAPD, random amplified polymorphic dimorphism; SDS, sodium dodecyl sulfate; SEM, scanning electron microscopy; s.l., sensu lato; s.s., sensu stricto; subsp., subspecies; TEM, transmission electron microscopy

Genetics: *A*, mean number of alleles per locus; *D*, mean genetic distance; CI, consistency index; *F*, fixation index; *F_{IT}*, total deviation from Hardy-Weinberg expectations; *F_{ST}*, genetic diversity among populations; *F_{IS}*, inbreeding within populations; *G_{ST}*, the proportion of genetic diversity among populations; *H_e*, Hardy-Weinberg expected heterozygosity; *H_o*, observed heterozygosity; MP, most parsimonious tree; *n*, individual chromosome number; *N_m*, mean number of migrants per generation; *P_p*, percentage of polymorphic loci; RI, retention index; *x*, base chromosome number

Statistics and math: ANOVA, analysis of variance; CV, coefficient of variation; df, degrees of freedom; *N*, number of individuals; *p*, probability; *P*, level of significance; PCA, principal components analysis; *r*, coefficient of correlation; SE, standard error; SD, standard deviation