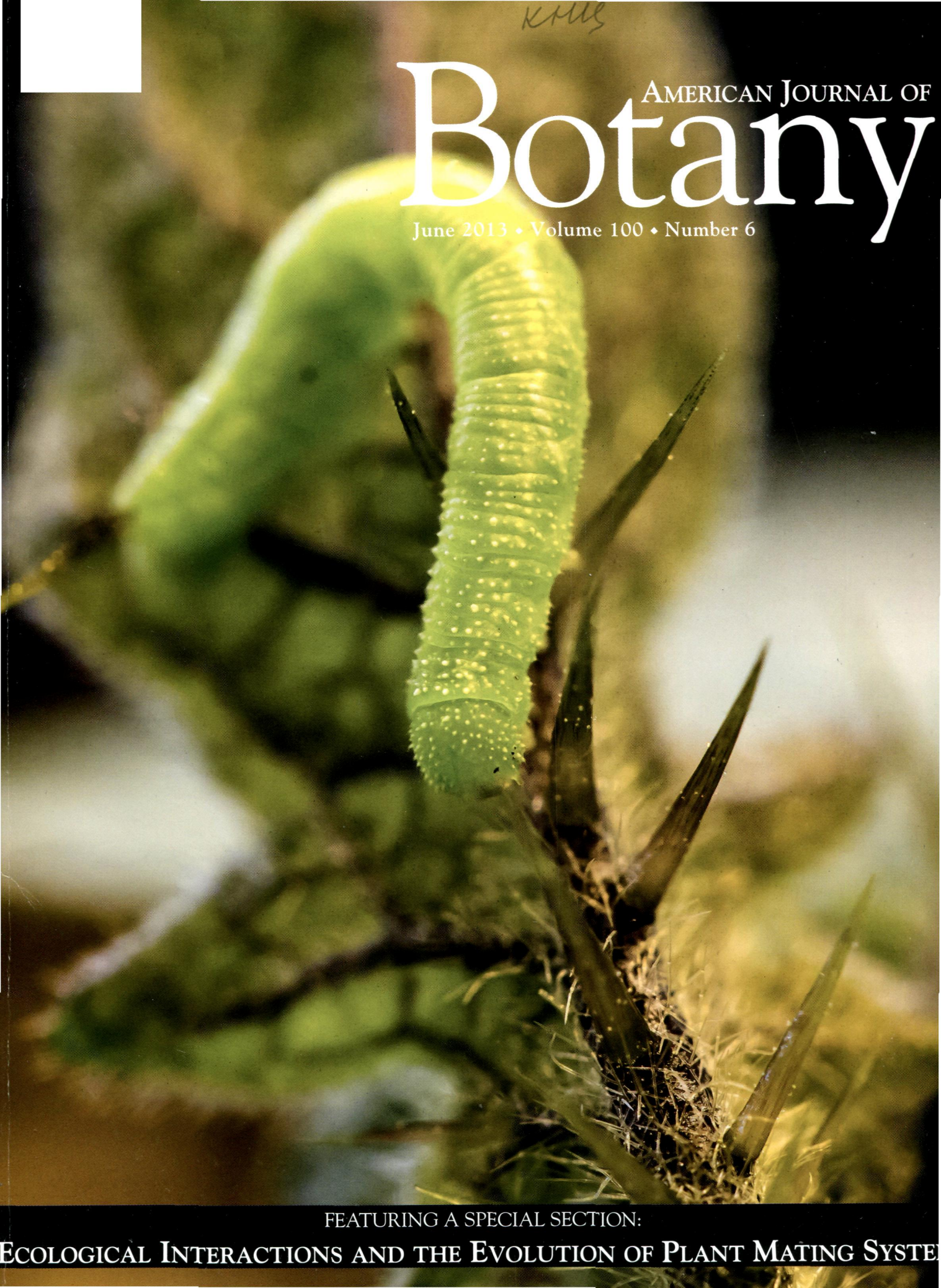

AMERICAN JOURNAL OF

Botany

June 2013 • Volume 100 • Number 6

FEATURING A SPECIAL SECTION:

ECOLOGICAL INTERACTIONS AND THE EVOLUTION OF PLANT MATING SYSTE

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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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; ddH_2O, double-distilled water; dNTP, deoxyribonucleotide E.C., 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; Nm, 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