



## REFEREED RESEARCH

Native species richness of commercial plant vendors in the Midwestern United States 4

**Jack Zinnen and Jeffrey W Matthews**

A survey of native plant materials use and commercial availability in the Eastern United States 17

**Sara Tangren, Edward Toth, and Shanyin Siegel**

Propagation of beaked hazelnut (*Corylus cornuta*) from softwood cuttings 33  
**Jessica Jacqueline Hudson, Kimberly Gould, Ann Smreciu, and Dani Degenhardt**

Seed collection, storage, and germination practices may affect *Viola* reintroduction outcomes 40

**Sam Kilgore, Kayri Havens, Andrea Kramer, Ashlyn Lythgoe, Linda MacKechnie, and Marcello De Vitis**

Effect of temperature, light, and seed provenance on germination of *Paronychia erecta* (squareflower): a native plant with ornamental potential 56  
**Gabriel E Campbell-Martínez, Carlee Steppe, Sandra B Wilson, Mack Thetford, and Debbie Miller**

Evaluating methods to establish biodiverse pasturelands with native grasses and wildflowers 65

**Shayan M Ghajar, Jennie F Wagner, Megan O'Rourke, and Benjamin F Tracy**

Herbaceous mimosa persistence in grazed pasture 75

**Montgomery W Alison, William D Pitman, Kun-Jun Han, and R Alan Shadow**

Mapping potential butterfly milkweed (*Asclepias tuberosa*) habitat in Mississippi using Species Distribution Modeling (SDM) and Geographic Information Systems (GIS) 84

**Emma R Neigel, Richard L Harkess, and Amelia AA Fox**

Impact of biostimulant and cultural factors on whorled mountainmint (*Pycnanthemum verticillatum* (Michx.) Pers. var. *pilosum* (Nutt.) Cooperr.): growth performance and assessment of arthropod visitation 97

**Bethany A Harris, Emilee M Poole, and Svoboda V Pennisi**

## PROPAGATION PROTOCOL

Propagation by means of embryo excision for endangered clay phacelia *ex situ* seed production 115

**Sydney Houghton, Susan E Meyer, and Olga R Kopp**

Vegetative propagation of *Ceanothus velutinus* using stem cuttings 123

**Asmita Paudel, Youping Sun, Larry A Rupp, John G Carman, and Stephen L Love**

## GENERAL TECHNICAL

Seed production and propagation of northern bog violet (*Viola nephrophylla*) for Nokomis fritillary (*Speyeria nokomis*) butterfly habitat restoration 130

**Derek Tilley, James Spencer, and Mary Wolf**

## BOOK REVIEW

*Getting to the Heart of Science Communication: A Guide to Effective Engagement* 139

## AUTHOR GUIDELINES

140

**Photo credits:** (top) Buckeye butterfly (*Junonia coenia* [Lepidoptera: Nymphalidae]) on butterfly milkweed (*Asclepias tuberosa* L. [Asclepiadaceae]), photo by Henning Von Schmeling; (middle) prairie violet (*Viola pedatifida* G. Don [Violaceae]) fruits and seeds, photo by Eriko Kojima; (bottom) one of the grazed, no-imazapic wildflower plots; here, black-eyed Susans (*Rudbeckia hirta* L. [Asteraceae]) and beef cattle thrive, photo by Benjamin Tracy.