Insectary Plants to Enhance Beneficial Insects: Expanding the Palette to Increase Options for Sustainable Crop Production in the NC Region

Whether building boxes for mason bees or planting habitat for predatory beetles, farmers seeking sustainability can encourage populations of pollinators and beneficial insects on the farm.

Researcher Doug Landis knows that many native plant species are highly attractive to both pollinators and natural enemies, and with help from a $199,887 NCR-SARE Research and Education grant, he and a team at Michigan State University received support to study native plants and learn more about their ability to naturally support native bees and other beneficial species and to identify those plants that are suitable for growth in dry soils. Together with a team of Michigan State University entomologists, they conducted weekly sampling of natural enemy and pollinator abundance on 54 species of plants found in Michigan.

“Our data show that many native plant species are highly attractive to both pollinators and natural enemies with floral area being the best predictor of attractiveness,” reported Landis. “Among the species we tested, plants can be selected from early, mid, and late bloom periods to provide continuous resources for pollinators and natural enemies throughout the growing season.”

Because their results showcased a wide variety of plants and their attributes, they developed a portal website with information regarding native plants and the ecosystem services they provide. It includes a plant selection tool which allows users to identify native plants that are suitable for their locations and purposes. Users can also find detailed information about natural enemies and biological control, pollinators, and pollination services.

For more information on Minning’s NCR-SARE Research and Education grant project, visit the SARE project reporting website. Simply search by the project number, LNC14-361, at https://projects.sare.org/, or contact the NCR-SARE office.