



## FACT SHEET

### **The Value of Neonicotinoid Insecticides in North American Agriculture**

#### *A Case Study of Neonicotinoid Use in Mid-South Cotton*

#### **Summary**

As part of a comprehensive evaluation of the economic and societal benefits of neonicotinoid insecticides, researchers identified individual growers for case studies to more deeply examine their thoughts on the value these products bring to their operations. One such grower is John Lindamood, who farms about 4,200 acres, half of which is cotton.

Lindamood's family has been farming some of the same land in Tennessee for more than 75 years, and he fully appreciates what it takes to bring a successful crop to harvest. Cotton requires specialized management and is an intensive crop to grow. Neonicotinoids are fundamental to Lindamood's cotton production system. These products are a critical part of his integrated pest management (IPM) program, allowing effective control of early-season pests while preserving beneficial insects that help keep other pests in check. Lindamood fears the loss of neonicotinoids would make cotton production untenable, creating a ripple effect that would have serious repercussions not only to his operations, but also to the economic health of his community.

#### **Key Findings**

- U.S. cotton accounts for \$25 billion in products and services annually, generating about 200,000 jobs nationwide.
- About 12 million bales of cotton are shipped overseas, accounting for over 30 percent of the total world export market, helping reduce the nation's trade deficit while supporting employment.
- Because it is intensively managed and highly specialized, cotton provides more of an economic boost to local communities than almost any other crop.
- Neonicotinoids are used for early-season control of wireworms, thrips and plant bugs, as seed treatments or foliar sprays and are a critical component of cotton IPM programs.
- The early use of neonicotinoids allows for less frequent spraying and helps increase the health and vigor of the plants, which translates to lower seeding rates, less costs and higher yields.
- The loss of neonicotinoids would force growers to use older broad-spectrum chemicals, which would disrupt beneficial insects and lead to still more foliar sprays for secondary pest control.
- Lindamood fears that an overreliance on older chemicals also would lead to pest resistance development, while increasing worker safety concerns.

- Although bees are not needed for cotton pollination, Lindamood's farm has allowed a local beekeeping operation in and around his farmland for 70 years.
- The loss of neonicotinoids could "provide the tipping point for a shift away from cotton production," said Lindamood, noting the economic impact would be "dramatic and irreversible."
- Lindamood's business employs 18 people full-time and employs 20 more on a seasonal basis, and his cotton gin is one of the largest taxed facilities in his community.
- Cotton production has helped positively impact local land values, specialty equipment sales, auto dealerships, banking, and insurance industries, making it a primary economic driver.

### **Report Reference**

#### ***The Value of Neonicotinoid Insecticides in North American Agriculture: A Case Study of Neonicotinoid Use in Mid-South Cotton***

*This report is one in a series that will be released over the next few months as part of a comprehensive evaluation of the economic and societal benefits of neonicotinoid insecticides in North America. The research was conducted by AgInfomatics, a consulting firm of independent agricultural economists and scientists, and jointly commissioned and sponsored by Bayer CropScience, Syngenta and Valent U.S.A.*

*All reports will be published online beginning October 28 at: [www.GrowingMatters.org](http://www.GrowingMatters.org).*

### **About Growing Matters**

Growing Matters is a coalition of organizations and individuals committed to scientific discourse on the stewardship, benefits and alternatives of neonicotinoid insecticides in North America. [Bayer CropScience](#), [Syngenta](#) and [Valent U.S.A. Corporation](#) are leading this coalition with support from Mitsui Chemicals Agro, Inc.

Agriculture and horticulture are key to nourishing families and communities. Feeding a growing population, enhancing the beauty of our surroundings, and sustaining a commitment to environmental protection are fundamental needs that matter. Crop protection products, both natural and synthetic, are important tools that protect plants from tough and invasive pests that can devastate crops and urban landscapes.

Go to [www.GrowingMatters.org](http://www.GrowingMatters.org) for the latest information, reports, videos and infographics on the benefits of neonicotinoid insecticides or to show your support.