ANTICIPATING NEEDS / Latin American growers spend over $250 million annually to spray for stink bugs. Soybeans in the southern United States (U.S.) are also affected by stink bugs, but at a lower frequency. U.S. costs due to insecticide treatments and crop damage have exceeded $50 million in years with high insect pressure. If left untreated, stink bug infested fields can see yield losses of six to over 12 percent, depending upon insect density. Secondary losses due to reduced seed quality from infection and seed shriveling add to these costs. Stink bugs are a multispecies complex of pests including the neotropical brown stink bug, brown marmorated stink bug, red banded and southern green stink bug (shown). Nearly all farming hectares in Brazil are treated with insecticides to treat stink bug infestations. The availability of strong performing, hemipteran resistant product options would reduce, and possibly eliminate, the need for expensive insecticide control applications. Higher crop yields and reduced insecticide application will increase farmer profitability and provide a sustainable, environmentally beneficial insect management option.

DELIVERING SOLUTIONS / Pioneer researchers are discovering novel insecticidal actives against stink bugs. Genes are screened, tested, and evaluated for efficacy and leads are selected for biotech trait product development for use in soybean products. Future products will offer broad spectrum control against the stink bug complex in a manner consistent with the Pioneer commitment to a healthy environment.