

New pest-resistant GMO rice shows no effect on beneficial insect

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

T1C-19 is newly developed transgenic rice active against lepidopteran pests, and expresses a synthesized *cry1C* gene . . . The brown planthopper, *Nilaparvata lugens*, is a major non-target pest of rice, and the rove beetle (*Paederus fuscipes*) is a generalist predator of *N. lugens* nymphs. As *P. fuscipes* may be exposed to the Cry1C protein through preying on *N. lugens*, it is essential to assess the potential effects of transgenic *cry1C* rice on this predator. In this study, two experiments . . . were conducted to evaluate the ecological risk of *cry1C* rice to *P. fuscipes*. No significant negative effects were observed in the development, survival, female ratio and body weight of *P. fuscipes* in both treatments of direct exposure to elevated doses of Cry1C protein and prey-mediated exposure to realistic doses of the protein. This indicated that *cry1C* rice had no detrimental effects on *P. fuscipes*. This work represents the first study of an assessment continuum for the effects of transgenic *cry1C* rice on *P. fuscipes*. Use of the rove beetle as an indicator species to assess potential effects of genetically modified crops on non-target arthropods is feasible.

Read full, original post: [No impact of transgenic cry1C rice on the rove beetle *Paederus fuscipes*, a generalist predator of brown planthopper *Nilaparvata lugens*.](#)