Antifeedants of Indian Barnyard Millet, Echinochloa frumentacea Link, against Brown Planthopper, Nilaparvata lugens (Stål)

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Eight compounds isolated from Indian barnyard millet have been identified as L-malic acid, trans-aconitic acid, (+)-isocitric acid, 5-O-caffeoylquinic acid, 4-O-caffeoylquinic acid, isocarlinoside, 2'-O-rhamnosylisorientin, and 7-O-(2''-O-glucuronosyl)glucuronosyltricin, respectively. These compounds showed high antifeeding activity against brown planthopper only when they were combined.

Key words: Nilaparvata lugens, Antifeedant, Echinochloa frumentacea