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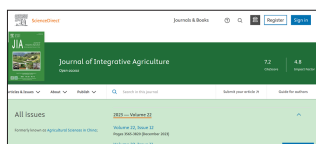
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Letter

Comprehensive phenotypic, physiological, and genetic analyses reveal stronger seedling-stage drought tolerance in *xianindica* than *gengjaponica* rice 3917

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Cover Story Brown planthopper (*Nilaparvata lugens*) is one of the most devastating pests of rice, causing severe yield losses. Its success as a phloem-feeding insect depends largely on salivary proteins that modulate host plant defenses and facilitate nutrient acquisition. However, the functional diversity of these effectors and their roles in insect physiology remain poorly understood. This study characterized NISP6935, a salivary gland-specific protein conserved across the three major rice planthopper species, it demonstrated that *NISP6935* is indispensable for insect survival, feeding, and reproduction. Mechanistically, silencing *NISP6935* disrupted lipid metabolism and dramatically downregulated cuticular protein expression, while its overexpression in plants suppressed H_2O_2 accumulation and terpenoid biosynthesis. Transgenic rice overexpressing *NISP6935* could not rescue RNAi-induced mortality, underscoring the dual roles of this effector in both insect physiology and plant defense suppression. The cover photo illustrates an evolutionary scenario wherein salivary proteins serve as a spear breaching the shield of rice immunity, allowing the planthopper to achieve successful feeding. This photo was provided by Dr. Zelong Zhang from Ningbo University, China. For more details, please see pages 3762–3774.