

P100

Developing New Microsatellite Markers of *Sogatella furcifera* by using NGS Technology

Hwa Yeun Nam¹, Brad Coates², Kyung Seok Kim², Chris Wright³,
Marana Park¹ and Joon-Ho Lee¹

¹Department of Agricultural Biotechnology, Seoul National University

²USDA-ARS, CICGRU, Genetics Laboratory, Iowa State University

³W.M. Keck Center, University of Illinois at Urbana-Champaign

White-backed planthopper, *Sogatella furcifera* (Horvath) (Hemiptera: Delphacidae), has been a serious migratory pest in Korea. It is important to figure out the migration route and gene flow of *S. furcifera*. Microsatellite marker (SSR) shows high efficiency as molecular markers. Unfortunately, various microsatellite marker of *S. furcifera* has not been developed to see genetic diversity. *S. furcifera* samples were collected from Vietnam, Laos and three different sites of Bangladesh in 2012. We extracted DNA by using QIAamp DNA Mini Kit and ran next generation DNA sequencer (NGS) Roche 454 to develop a new microsatellite marker. Roughly, about 18 singleton primers and 14 contigs primers were found. We will test these primers with *S. furcifera* DNA samples, and figure out the accurate new microsatellite marker.

Key words: *Sogatella furcifera*, white-backed planthopper, next generation sequence (NGS), microsatellite, genetic diversity