Genetics of Elytra Color Patterns in Multicolored Asian Ladybird Beetle, *Harmonia axyridis* (Col.: Coccinellidae)

Mi Ja Seo, Eun Jin Kang, Seon Nam Park, Yong Man Yu and Young Nam Youn
Department of Applied Biology, College of Agriculture & Life Sciences, Chungnam National University, Daejon, 305-764

One of the surprising features of ladybirds is that some species are very variable in color pattern. In case of *Harmonia axyridis*, it has been called the multicolored asian ladybird beetle. Early studies have considered color polymorphism in coccinellids in terms of geographical clines, while a few investigated temporal populations. There is as yet no evidence to indicate whether the variation is genetic or environmental factors. In this study, the genetic relationships among many of color patterns studied by looking at the progeny which was produced from particular pairs. Through pairing experiments, we tried to find whether the dominant color pattern was present, and whether the differences were present according to the sex. Also we investigated how parental color patterns have an effect on that of their progenies.