# The Differences in the Larval Headcapsule Widths and Weights of Tobacco Cutworm, *Spodoptera litura* Fabricius on the Three Different Hosts and Temperatures

**Keunbok Jang and Kijong Cho**
Department of Agricultural Biology, Korea University

We measured the headcapsule widths and weights from Tobacco cutworm, *Spodoptera litura* Fabricius to describe the distribution of each larva. We investigated three different hosts(an artificial diet, lettuce, *Lactuca sativa* (L.), and perilla, *Perilla frutescens* var. Japonica) and two temperatures (25℃ and 30℃). We described an computer program (HCAP) for analysis of larval headcapsule data. We found there were seven larvae in three different hosts and 25℃, 30℃, although six larvae in lettuce and 30℃. The means of the larval weights resulted 0.89~755.33mg reared on lettuce, 0.69~323.43mg reared on perilla, and 0.86~418.04mg reared on an artificial diet. The results showed the significant differences among larvae reared on three different hosts and two temperatures. These results indicate that the larval development is affected by host plants and temperatures.