

Developmental and Morphological Characterization of the Wild Silkmoth, *Samia cynthia ricini*

Nam Sook Park¹, Chang Sik Jang¹, Ho Oung Lee¹,
Pil Don Kang² and Sang Mong Lee¹

¹*Department of Proteomics, Genomics and Bio-materials, Miryang National University*

²*Department of Agricultural Biology, National Institute of Agricultural Science and Technology, RDA*

The wild silkmoth, *Samia cynthia ricini*, was reared under the laboratory rearing condition. The developmental and morphological characteristics of the wild silkmoth were analysed. The egg-shape was short round. The body color of the larvae changed greatly during larval developmental stages. The newly hatched larvae showed black-brown, and the body color was changed to be yellowish during the development of 2nd instar. Also, at 3rd instar, the body color was green-yellow. From 4th instar to 5th instar, the body color was white all the time. The head showed 3 changes in color during larval development: black from 1st to 3rd instar, brown during 4th instar and light yellow during 5th instar. The number of eggs laid per moth was about 200 eggs. The whole larval duration was about 20 days, and the life cycle showed about 42 days from egg to egg stage. The single cocoon weight, cocoon shell weight, and cocoon shell percentage were 2.76 g, 38.4 cg and 14.1%, respectively. The cocoon shape and color were spindle and white, respectively. The morphology of the silk gland was greatly different from those of *Bombyx mori*, *Antheraea yamamai* and *Antheraea pernyi* : the thickness of the middle and posterior silk gland was almost identical.