

# Developmental Characteristics of the Wild Silkmoth, *Actias gnoma*

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The wild silkmoth, *Actias gnoma*, was firstly collected at Suwon located in the middle part of Korea. The developmental characteristics of the *A. gnoma* reared under the laboratory condition were analysed. The egg shape was shorter elliptic and the white mucous material was remained inside the eggs after hatching. Interestingly, the body color of the 3rd instar larvae was changed from dark brown to light yellowish-green, thereafter the amazing body color change did not occurred until the pupation. From the feeding test of the *A. gnoma* larvae to several plants, the oak tree *Quercus acutissima* was newly identified as a host plant to the above silkmoth. The final larval instar was either 6th or 7th instar, so unfavorable environments to the larvae were considered to cause expansion of one instar during larval development. In some cases, the larvae just after each ecdysis ate his own cast. The whole larval duration ranged from 45 to 59 days. The single cocoon weight, cocoon shell weight and cocoon shell percentage were 1.65 g, 31.3 cg and 18.9%, respectively, also the cocoon shape and color were spindle and light brown. The morphology of the silk gland was different from those of *Bombyx mori*, *Antheraea yamamai* and *Antheraea pernyi*: the thickness of the middle and posterior silk glands were almost identical.