

# Ecological Characteristics of *Dorcus hopei* (E. Saunders) for the Development of Mass-rearing Technique in Korea

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This study was carry out to review the distributional data of *Dorcus hopei* in Korea and to investigate ecological characteristics to develop a mass rearing technique of the species. The coupling period of the male and female was needed at least 2 weeks in condition of 6 months after emergence, and the ratio of male and female was recommended to 2♀: 1♂ coupled. Eggs were laid singly, up to 27.3 per female. The pre-oviposition period was average 147.3 days, egg-period was 15.6 days, and oviposition period was at least 120 days. The optimum size of oviposition room was 55x40x35 cm with 3-4 oviposition-tree cut in size 15x15 cm. *Quercus acutissima* was show higher preference for the oviposition. Developing period of each instar in the insectary (25°C, 75%RH, 16L:8D) was 24.1 days for 1st instar, 29.8 days for 2nd, and 131.2 days for 3rd instar, and pupal period 28.9 days. The longevity of adults was longer than 35 months. The period of dominance induced was needed at least 80-100 days in 4-5°C C and the treatment of 20 days in 10°C, 15 days in 15°C, 5 days in 20°C and 25°C respectively were needed to break the dominance.