Ecological Characteristics of Korean Native Bumblebee, Bombus hypocrita saporoensis

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The post-hibernated queens of Korean native bumblebee, Bombus hypocrita saporoensis were collected in Jeong-Sun, Korea in the spring of 2004 to investigate their ecological characteristics and reared under the laboratory conditions; 27°C, 65% R.H. and darkness. The average weight of 80 queens collected was 0.64 ± 0.11 g and 0.6g class was most abundant (49.4%) among eight weight classes. The rates of colony initiation, colony foundation and progeny-queen production were 76.3%, 60.0% and 42.5%, respectively. The durations up to colony initiation and colony foundation were 12.0 ± 6.7 days and 49.3 ± 2.4 days, respectively. The duration up to first worker, male and queen emergence were 22.2 ± 3.0 , 63.4 ± 6.5 , 63.5 \pm 8.7, respectively. The number of progenies was 108.5 \pm 26.0 workers, 186.7 ± 70.7 males and 39.1 ± 30.3 queens. The longevity of colony founded queen was 90.2±19.9 days whereas that of non-colonized queen was 35.9 ± 13.1 days. Copulation time was 29.0 ± 7.1 min. The number of eggs per egg cell laid new queen was 8.8 ± 2.9 grains. An egg shaped as banana and size was 1.12 ± 0.10 mm in a width, 3.54 ± 0.16 mm in a length and 2.26 ± 0.34 mg in a weight.