Comparison of Colony Development of the Bumblebees, Bombus ignitus by Rearing Boxes

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Colony development of *Bombus ignitus* by rearing boxes was investigated as a part of economical mass-production system. The rates of oviposition, colony foundation and progeny-queen production at cardboard-rearing box were 86.0%, 70.3% and 54.8%, respectively, which are 1.3-34.0% higher than those at plastic-rearing box. The period up to worker emergence and colony foundation of cardboard-rearing box were 22.6 days and 49.1 days, respectively, and these values were 6.1-10.5 days shorter than those of plastic-rearing box. The period up to male emergence of cardboard-rearing box was 4.4 days shorter than those of plastic-rearing but, the period were not affected by rearing boxes. The numbers of progenies produced at cardboard-rearing box, 159.2 workers, 233.1 males and 39.5 queens, were also, higher, corresponding to 1.5-2.3 fold those at plastic-rearing box. Therefore, above results showed that colony development of cardboard-rearing box is superior to that of plastic-rearing box. But, for economical mass-production, it can be concluded that application of improved plastic-rearing box, which reduces labor force may also be efficient.