

**Ecological Characteristics of Dung Beetle,  
*Copris ochus* (Motschulsky)  
(Coleoptera: Scarabaeidae)**

**Hea Son Bang, Young Il Mah and Suk Jo Hwang**

Department of Sericulture and Entomology,  
The National Institute of Agricultural Science & Technology, RDA

Seasonal activity of *Copris ochus* (Motschulsky) was studied in Che-ju islands, South-Korea. It is a univoltine species, with peaks of activity in summer. A pair of adult beetles can bury up to 300ml of dung from one dung-pad. Females lay an average of one egg for every 45ml of dung buried. The weight of brood ball  $40.3 \pm 5.32$ g. Brood balls were buried in the depth of 22 to 35cm below dung pad. Dung was brought into an underground and consumed to form 2~3 brood balls in which an egg was laid. The female remained in the nest while the brood developed. She repaired any damage of the nest or brood balls and attacked other insects that entered in the nest. Oviposition took place from August to October. Adult females deposited a single egg in the egg chamber of each brood ball. Eggs were 6.81 to 7.43mm long and 2.52 to 4.61mm wide. Embryonic development required  $9.0 \pm 1.68$ d(25°C). The third instar was reached by late October, entered diapause and adults emerged on the following summer. Development from egg to imago required about 60-70 weeks. A field population of adults *C. ochus* was sampled for two years. Maximum number of individuals was recorded from late July to late August, while populations declined during September, and activity ceased on late October. It overwinters mainly as the 3th instar and the adult.