$$ \begin{array}{cccccc}
\text{Soil sample} & 1 & 2 & 3 & 4 & 5 & \bar{X} \\
\hline
\text{Crickets introduced} & 10 & 7 & 6 & 5 & 3 & - \\
\text{Crickets recovered} & 9 & 6 & 6 & 3 & 3 & - \\
\% & 90 & 85.7 & 100 & 60 & 100 & 87.1
\end{array} $$

Materials for constructing the hopper and frame cost less than $60, and both can be easily transported in a pickup truck or station wagon. The sifter yields live crickets and could also be used to separate other soil-dwelling insects provided they are buoyant in water.

I thank T. J. Walker and W. T. Walker for their help and advice on this project.—Gary N. Fritz, Entomology-Nematology Dept., University of Florida, Gainesville, Florida 32611, USA. Present address: Dept. Entomology & Plant Pathology, Box 3BE, New Mexico St. Univ., Las Cruces, NM 88001 USA.

LYRIFORM ORGANS IN THE CENTIPEDE SCUTIGERA (SCUTIGEROMORPHA: SCUTIGERIDAE)—A replica method for light microscopy (K. T. Khalaf. 1980. Florida Ent. 63: 307-40) at 400 X magnification was used to observe the cuticular pattern of the entire dorsum of the centipede Scutigera sp.

The dorsal cuticle of the head and tergal plates possesses numerous organs, each consisting of a striated tubercle and a slender companion trichium (Fig. 1, 2). These appear to be similar to the lyriform organs of the legs of some arachnids, which were illustrated by Barth (1976. Pages 445-73. In H. R. Hepburn, ed. Elsevier Scientific Publishing Co., New York). Lyriform organs are composed of close and parallel slit sense organs. Functionally, they serve as cuticular mechanoreceptors, stimulated by compression of the slits. As far as I know, these organs have not previously been reported from centipedes.

This investigation received support from the Academic Grant Fund of Loyola University.—Kamel T. Khalaf, Loyola University, New Orleans, LA 70118 USA.
Fig. 1, 2. Light micrographs of replicas of the integument of *Scutigera* sp.: 1, head. 2, tergal plate. Total magnification X 1200.

**FIREFLY CHROMOSOMES (PHOTINUS, PHOTURIS; LAMPIRIDEAE COLEOPTERA)**—Over a year period, Professor James Lloyd of the University of Florida at Gainesville kindly collected, identified and sent us specimens of several species of fireflies. After considerable amount of preliminary difficulty and by employing protocols, somewhat modified, of Lewis and Riles (1960, Drosophila Information Service 34: 118-9) and Oster and Balaban (1963, Drosophila Information Service 37: 142-4), we made the following observations with adult gonadal squashes:

Two *Photinus nudermotti* Lloyd males were found to have 19 chromosomes, the smallest being the X (Fig. 1). At diakinesis, one observes 10 bodies: one large ring bivalent which probably consists of a pair of metacentrics with 2 terminal chiasmata; one smaller ring bivalent which probably is a pair of acrocentrics with 2 terminal chiasmata; 7 pairs of acrocentric bivalents each with a single terminalized chiasma; and a univalent dot which is the X chromosome. The X chromosome was not seen to be dividing. Stevens (1909, J. Exper. Zool. VI: 101-13), working with species whose correct identity cannot be known with certainty, reported that the males of both "Photinus consanguineus" and *Photurus pennsylvanicus* ("Photinus pennsylvanicus" of Stevens; *pennsylvanicus* has since been found to be a complex of many species, Barber, 1951, Smithsonian Misc. Coll. 117, 1: 1-58) also have 19 chromosomes. Moreover, she reported that the X divides