A simple separation bag, a device to sort swept insects

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ABSTRACT. — The construction of a simple device to aid in sorting swept insects is depicted. This kind of a separation bag consists of a wide plastic (PVC) ring, with a fixed clear plexiglass top, and with a white cloth bag with a slit attached to the ring.

Masner & Gibson (1979) described the construction of a "separation bag", i.e., a device to sort swept material without the risk of loss of the most swift-moving animals, and to collect only the wanted specimens. Their construction consists of an aluminium ring of an inner diameter of 24 cm, a clear plexiglass lid and a white cloth bag with a small slit, attached to the ring. The lid is attached to the ring by flexible plastic magnetic tape; this requires a very even surface of the ring and the lid, to avoid the loss of small specimens via openings left by small irregularities. Because the usefulness of the device is obvious I tried to construct a similar bag. However, it proved difficult to get the appropriate materials. Therefore I abandoned the construction as proposed by Masner & Gibson and made a somewhat simpler device, which can be made more easily and is consequently cheaper.

The construction consists of a plastic PVC ring, sawn from a pipe (inner diameter 23.5 cm, outer diameter 24.7 cm) and with a length of 10 cm. The ring is painted white at the inner side

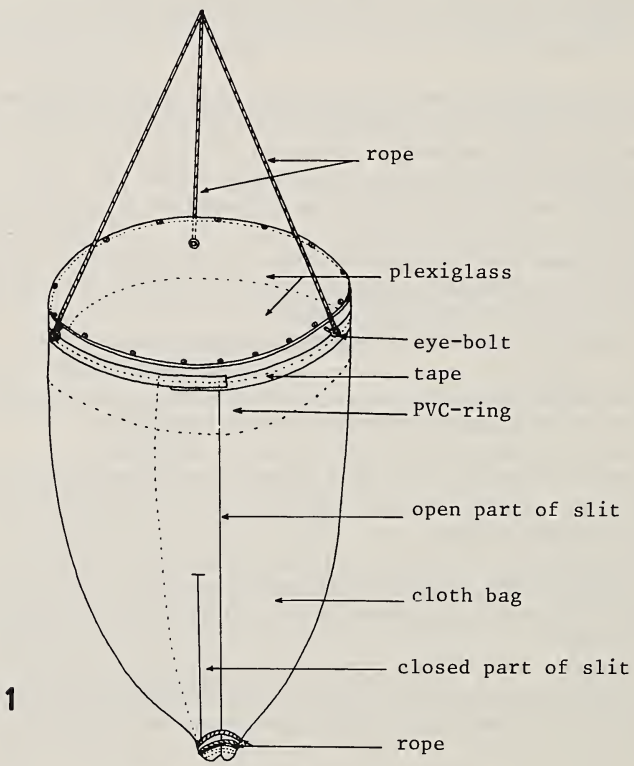

Fig. 1. Scheme of the separation bag.

Fig. 2. Separation bag used during the excursion at Mallorca.

and a clear plexiglass lid with a diameter of 25.5 cm is screwed on the ring (fig. 1). The top of the ring must be smooth and very even, so that after the transparent lid is fastened even the smallest insects cannot escape. To the lower end of the ring a white bag is attached made of a piece of white cloth of 90 (width) × 40 (height) cm with a double lower margin in which a piece of rope is inserted to close the lower end of the bag. If the rope is loosened the bag can be opened to remove the debris. The lower half of the bag is closed by sewing the loose parts. Finally the bag is attached to the ring by a 4 cm wide waterproof textile-based tape. Because of the free overlapping parts of the upper half of the bag a slit is formed through which the aspirator or another device can be used to collect the desired insects (fig. 2). To the ring three eye-bolts are fixed and three pieces of rope to hang the separation bag from a branch of a tree, from a pole between the stones of a wall, etc.

The swept catches are thrown in via the large slit at the side. After several catches are united one can start sorting out the specimens (fig. 2). The device was tested during an excursion with students to Mallorca and proved to be very useful, both for the collecting of small insects, spiders, etc. and for demonstrating live insects.

ACKNOWLEDGEMENTS

I wish to thank the Technical Department of the Subfaculty of Biology at the State University at Leiden for their assistance.

LITERATURE

Masner, L., & G. A. P. Gibson, 1979. A separation bag - a new device to aid in collecting insects. — *Can. Ent.* 111: 1197-1198, figs. 1-3.

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