



<http://www.biodiversitylibrary.org/>

**Entomological news.**

[Philadelphia]American Entomological Society, 1925-  
<http://www.biodiversitylibrary.org/bibliography/2356>

**v. 37-38 1926-1927:** <http://www.biodiversitylibrary.org/item/20495>

Article/Chapter Title: A killing bottle for collecting small active insects

Author(s): Metcalf, Z. P.

Subject(s): Hemiptera, Fulgoroidea, Auchenorrhyncha

Page(s): Page 203, Page 204

Contributed by: Smithsonian Libraries

Sponsored by: Smithsonian

Generated 24 November 2015 11:36 AM  
<http://www.biodiversitylibrary.org/pdf4/045675900020495>

This page intentionally left blank.



## A Killing Bottle for Collecting Small Active Insects.<sup>1</sup>

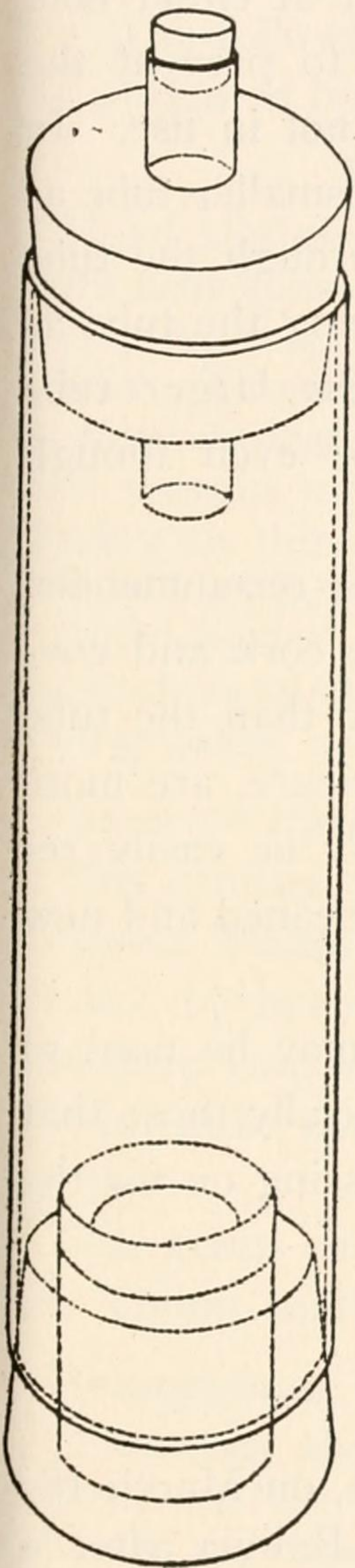
By Z. P. METCALF, Raleigh, North Carolina.

The usual method of collecting small active insects, such as leaf hoppers, etc., is to collect them with a strong bag and

to take them from the bag by means of small cyanide vials which are held in the hand with the mouth of the vial closed by the thumb, until the insect has settled to the bottom. In this way these active insects may be collected rather rapidly. The chief limitation of this method is that one must wait until the insect has settled to the bottom of the vial or become quiescent before he can remove his thumb to scoop up another specimen. On account of this delay valuable specimens will often be lost. The limitations of this method were especially noticeable in some work the writer is doing on the ecological distribution of common leaf hoppers in our mountain pastures. In this work it is desirable to secure all the specimens collected on definite areas. But by the usual method, large numbers of leaf hoppers would escape from the beating bag before they could be collected in the cyanide vial. We tried the method of placing the whole bag in a large killing bottle and waiting until the insects were killed and then sorting out the leaf hoppers. But this method was slow and the labor of sorting out the dead leaf hoppers from the weed seeds and other trash was very tedious. Finally we designed the killing tube shown in the attached cut which

has proved very effective. It consists of a piece of glass tubing about four inches long by an inch in diameter. One

<sup>1</sup> Published with the approval of the Director of the North Carolina Agricultural Experiment Station as paper number 9 of the Journal Series.





end is closed by a cork stopper of suitable size which carries a small vial containing cyanide. The other end is closed by another cork stopper which is pierced by a glass tube of sufficient diameter to allow the largest specimen to pass and just long enough to project beyond the cork stopper at either end. This small tube is closed by a small stopper to prevent the escape of the cyanide fumes when the tube is not in use. In use the insects are scooped up by means of the smaller tube as rapidly as possible. Usually they will pass through the tube with a single leap. Hence the necessity of having the tube as short as possible. Once they have entered the larger tube there is practically no chance of their escape even though the smaller tube is open.

The cyanide may be placed in a small vial as recommended above, or it may simply be packed around the cork and covered by pieces of cardboard cut slightly larger than the tube and pressed down firmly. Tubes, in our experience, are more desirable than vials because both stoppers may be easily removed and the old cyanide taken out, the tube cleaned and new cyanide inserted.

The writer believes that this same method may be used to advantage in collecting other small insects, especially those that are very active. Hence he thinks it is worth passing on for the benefit of others.

---

#### In South America.

Mr. A. F. Porter wrote from La Paz, Bolivia, on March 18: "I am spending a few days in the capital of Bolivia after a day at Cuzco, looking over the Inca ruins, and crossing Lake Titicaca. The snow caps about this city, some of which are over 22,000 feet elevation, are very beautiful. Was out to the Museum to-day and also saw an interesting private collection. Will leave for Lima, Peru, last of week and here my real collecting will begin."