

CONTAINMENT TYPE INSECT TRAP

BACKGROUND AND GENERAL STATEMENT OF THE INVENTION

This invention relates to containment type insect traps, particularly yellow jacket traps of the class designed to lure insects into the trap interior by the use of scent and color, without the use of poisonous baits.

The desirability of ridding gardens, picnic areas, playgrounds and other premises of yellow jackets is self-evident.

This desideratum is accomplished with particular efficiency by the present invention by taking advantage of yellow jacket eating characteristics.

Two types of food are consumed by yellow jackets. The sterile female workers normally eat only sweet liquid carbohydrate materials the natural source of which is nectar from flowers or sweet "honeydew" produced by aphids.

The developing larvae in the nests, on the other hand, eat principally proteinaceous materials.

Accordingly, in carrying out their responsibility of providing food for the larvae, the workers forage for proteinaceous materials from meat, carrion, fish, and other insects. This protein is taken back to the nest to feed the growing larvae.

It is the general purpose of the present invention to provide an insect trap, particularly a yellow jacket trap, of improved efficiency in attracting the insects to the trap by being adapted to contain both proteinaceous and carbohydrate baits, thereby satisfying the insects' requirement and desire for both types of foods.

It is a further object of the present invention to provide an insect trap of improved efficiency in trapping and killing the insects.

Another important object of the present invention is the provision of a containment type insect trap which uses common household materials as attractions for the insects and does not require the use of poison baits.

Other objects of my invention are the provision of an insect trap which, in a sense, is self-baiting, since it retains within the trap the corpses of the killed insects, which provide additional protein for use by the workers.

Still further objects of my invention are the provision of an insect trap which is simply and inexpensively constructed; which is easy to maintain and operate; and which maintains the bait moist and in a condition of maximum efficiency over long periods of time.

The foregoing and other objects of the present invention are achieved by the provision of an insect trap which, in its broad aspect, comprises a container providing an insect containment chamber and having at least one wall opening. Insect entry means into the containment chamber is mounted in the wall opening. The entry means comprises an entryway segment and a proteinaceous bait tray segment.

A sump for containment of carbohydrate bait in the form of aromatic fruit juices, as well as for a further quantity of proteinaceous bait, is provided at the bottom of the containment chamber. The sump serves also as a drowning pool for the insects.

Insects entering the chamber via the entryway segment first approach the bait contained in the bait tray segment as well as in the sump. Thereafter unable to find their way out, they fly about to exhaustion within the

chamber and fall into the scent pool at the bottom of the chamber, where they drown.

THE DRAWINGS

In the drawings:

FIG. 1 is a top perspective view of the insect trap of my invention.

FIG. 2 is a transverse sectional view taken along line 2—2 of FIG. 1.

FIG. 3 is a longitudinal sectional view taken along line

FIG. 4 is a fragmentary enlarged view in top perspective illustrating the manner of assembly of the trap, using a combination entryway and bait tray element in a first embodiment.

FIG. 5 is a detail view in side elevation of a combination entryway and bait tray element useful in the trap of my invention, in a second embodiment.

FIG. 6 is a view in side elevation of the insect trap of my invention in a third embodiment, partly broken away to show interior construction.

FIG. 7 is a transverse sectional view taken along line 7—7 of FIG. 6.

FIG. 8 is an enlarged, fragmentary, detailed view further illustrating the construction of the trap of FIGS. 6 and 7.

DESCRIPTION OF PREFERRED EMBODIMENTS OF THE INVENTION

In the embodiment of the invention illustrated in FIGS. 1-4, the insect trap is housed in a container, indicated generally at 10, which may comprise to advantage an openmouthed, jar-type container provided with a screw top 12.

The container body preferably is fabricated from clear plastic which, if desired, may be tinted in a color attractive to yellow jackets or other insects. It is provided with one or more large side, wall openings 14, which serve a support function, and with a plurality of smaller openings 16, which serve a scent-emission function. The support openings are arranged in diametrically opposed and axially aligned pairs. In practice, there may be two pairs of such openings having axes arranged at right angles to each other, as shown in FIG. 2.

The bottom of the container is liquid impervious and designed to contain a quantity of liquid 34, as shown in FIG. 3.

Support openings 14 are designed to receive and support novel combination entryway and bait tray elements which span the distance across the containment chamber.

As shown particularly in FIG. 4, each of these elements, indicated generally at 18, comprises a length of tubing of a resilient character having a longitudinal slot 20.

The tube is slightly oversized with respect to the diameter of support opening 14. It is dimensioned in such a manner that upon compression it may be inserted into openings 14, spanning the chamber. Upon release of the constraining pressure it springs back and is maintained mounted across the chamber by the resulting frictional mounting means.

The end segments of tubing length 20 comprise entryway segments 22 through which the yellow jackets or other insects enter the trap. The central portion of the tubing length is cut away to provide a central bait tray