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A MODEL OF ETHANOL TRAP TO COLLECT SCOLYTIDAE AND PLATYPODIDAE (INSECTA, COLEOPTERA)

EVONEO BERTI FILHO

ESALQ-USP, Departamento de Entomologia
13400 - Piracicaba - SP

CARLOS A. H. FLECHTMANN

Aluno do CPG em Entomologia
ESALQ-USP, Depto. de Entomologia
13400 - Piracicaba - SP

The integrated pest management is the complex of measures which has been shown to be the efficient approach on pest control. And the key piece in pest management is a suitable monitoring.

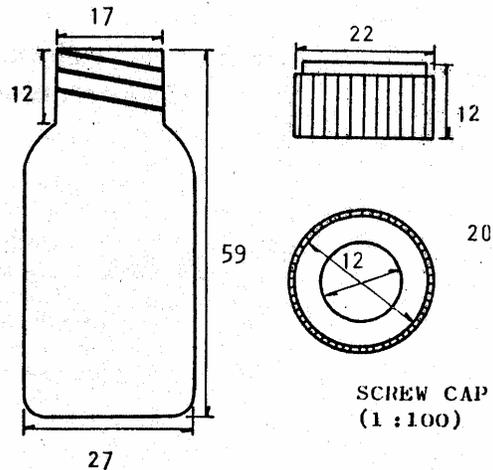
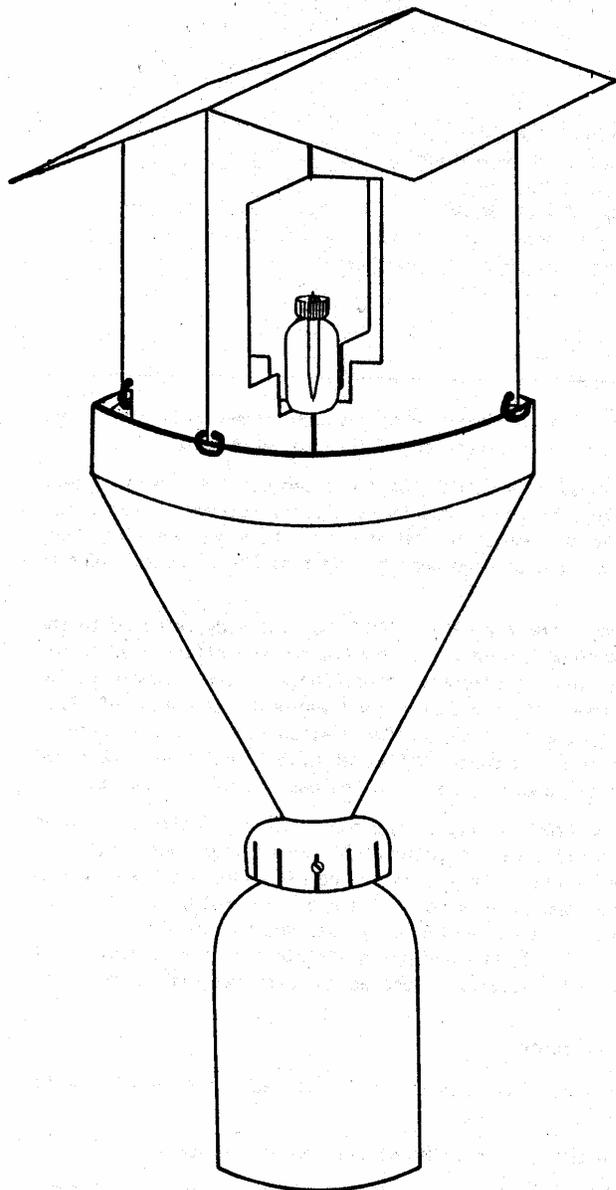
The ambrosia beetles of the families Platypodidae and Scolytidae are amongst the economic pests of the Order Coleoptera. The colonization of new trees by these insects is closely related to a bouquet of volatile components released by the plants. These pheromones may be divided into those exerting long distance attraction and the ones of landing and beginning of wood boring, and from the components of more localized action, the ethanol is the most known.

Buchanun (1941) and Browne (1952), cited by CAGNE & KEARBY (1978), have already referred to the attraction of ambrosia beetles by the ethanol. SAMANIEGO & GARA (1970) have shown the efficacy of ethanol in attracting ambrosia beetles, and that this action was directly proportional to the concentration used. VITÉ (1980) has observed the importance of ethanol in the landing and beginning of boring of **Trypodendron lineatum** (Scolytidae). MARQUES (1984), using ethanol as a primary attractant, has obtained excellent results in the capture of ambrosia beetles in **Pinus taeda**. VAUPEL et alii (1986) have observed the additive effect of ethanol, when added to lineatin and α -pinene, in the capture of **T. lineatum**.

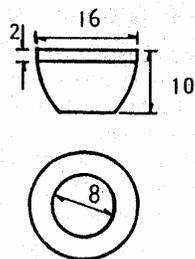
An ethanol trap (Figures 1 and 2), modified from the light trap model Luiz de Queiroz, was developed at the Department of Entomology of "Escola Superior de Agricultura Luiz de Queiroz", University of São Paulo, to be used in the capture of Scolytidae beetles. This trap, named ESALQ-84, has been successfully employed in the areas of tropical pines (**Pinus** spp.), in Agudos, State of São Paulo, Brazil, since the beginning of 1984. And recently it has been used in a survey of Scolytidae and Platypodidae related to the mango blight (**Ceratocystis fimbriata** Ellis & Harst). Besides being efficient in the capture of Scolytidae and Platypodidae, several other families of Coleoptera, such as Bostrychidae, Cerambycidae and Cleridae, have been collected as well.

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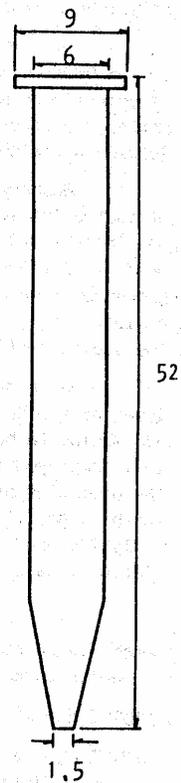
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DEPOSIT OF ETHANOL (Dimensions in mm)
(1 : 100)



RUBBER SEALING
OF THE DROPPER
(1 : 100)



DROPPER
(1 : 50)

Figure 1.- Ethanol trap model ESALQ-84.

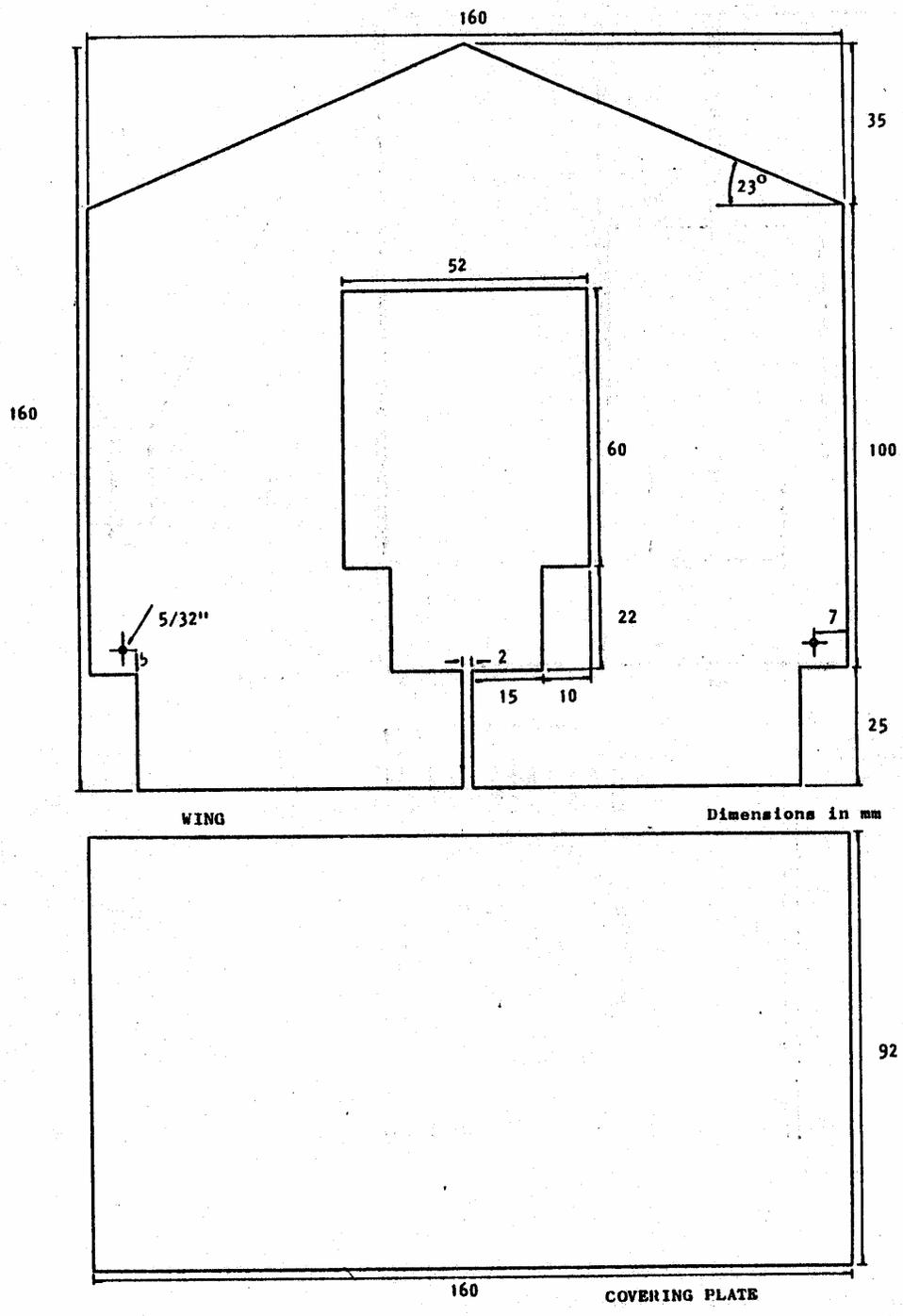


Figure 2.- Components of the ethanol trap model ESALQ-84.

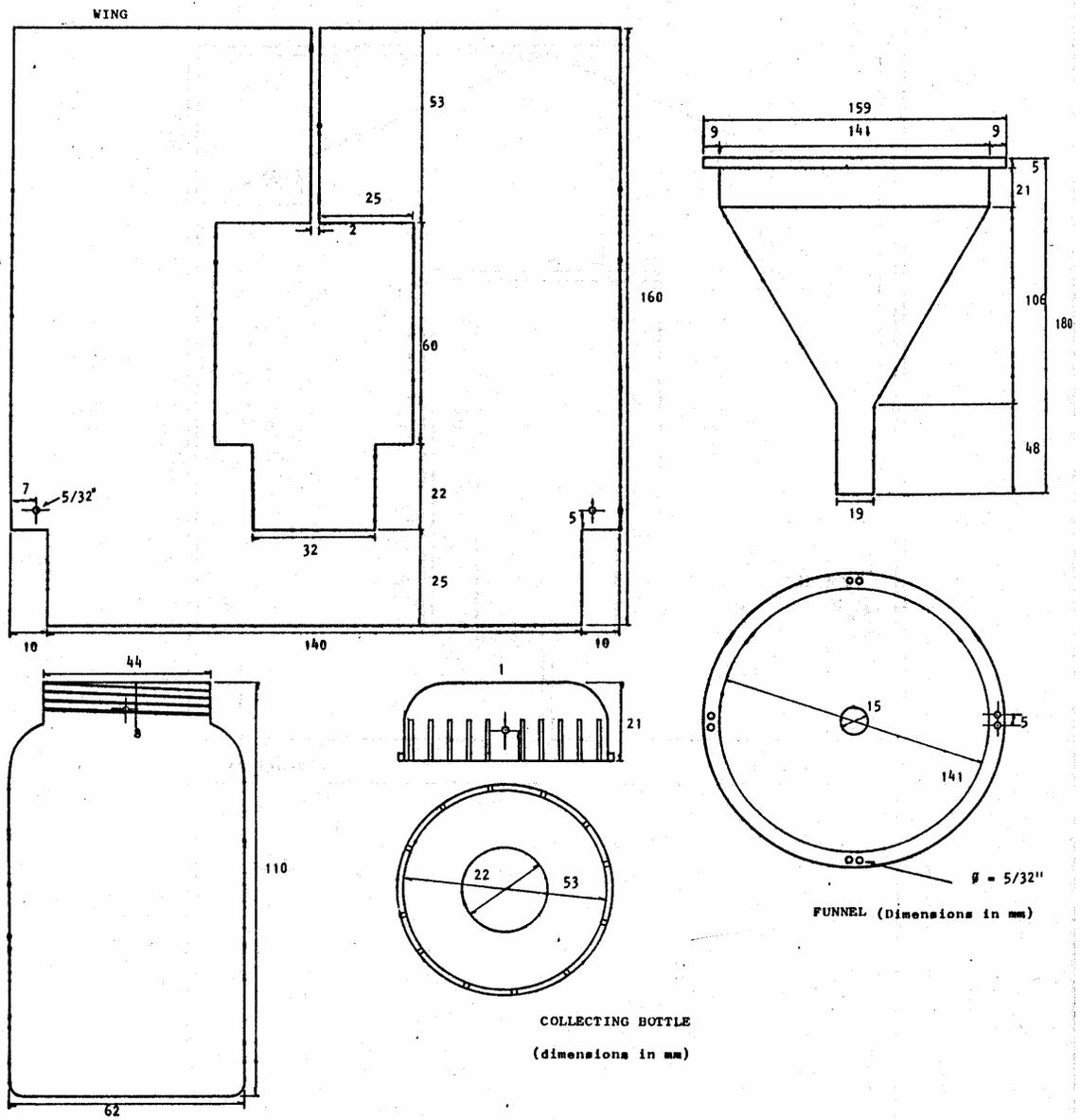


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