Malaise trap collection jar: a cheap simple modification

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ABSTRACT

A modification of the Malaise trap attachment and collection jar is described which is inexpensive, allows ease of handling and reduces damage to the trap.

Keywords: Malaise trap, jar attachment, insect trapping.

INTRODUCTION

When several Malaise traps (Townes 1972) were required for a sampling programme in the Waipapa Ecological Area (Hutcheson 1990), the proposed jar attachment was felt to be too expensive. Materials for the following design cost approximately $5.00 and it proved to have as good, if not better, collecting success as the old types. The main advantages other than cost over the old type are (1) the connection to the trap does not involve passing bolts through the mesh, a process which inevitably leads to damage over time, (2) the fitting can be easily removed to allow the trap to be washed or repaired and (3) the trap may be tied to existing vegetation where this is available, rather than requiring a cut pole.

The attachment comprises an inverted square polycarbonate jar with the top (threaded) section of a round polycarbonate jar fitted into the side. The trap is attached to this by means of the lid which has its centre removed. The lid of the square jar and the one from the collection container have their centres removed and are attached 'back to back'. This allows collection containers to be easily changed. Collection jars (such as hospital specimen containers) which can double as storage jars, simplify handling and storage of the catch.

Materials

- Two 100mm × 50mm polycarbonate jars, one square and one round in section (available through 'Payless Plastics' at approximately $1.50 each).
- 2 self tapping screws.
- Hot melt glue.
- Approximately 50mm easily bent wire.

Construction

The top of the round jar is cut off below the shoulder and the base is discarded. A hole is cut into one side of the square jar sufficient in diameter to allow the threaded part, but not the shoulder, of the round jar top through. The round jar's top is then squeezed completely through the hole in the side of the square jar, leaving the screw part facing outwards through the hole to form the horizontal inlet. Small holes are drilled each side and self tapping screws used to attach the shoulder firmly to the square jar. Hot melt glue seals around the joint.

The square jar top and a collection container top are glued and taped together 'back to back', and the centres of all 3 tops are removed with a hot scalpel, leaving a small lip around the edges. The complete attachment is then inverted and fitted to the trap using the screw top of the horizontal inlet (Fig. 1). The double lid is screwed into place on the square jar ready to take the collection container once the trap is erected. A short length of soft wire twisted around the attachment allows the trap to be tied up to existing vegetation where this is available.

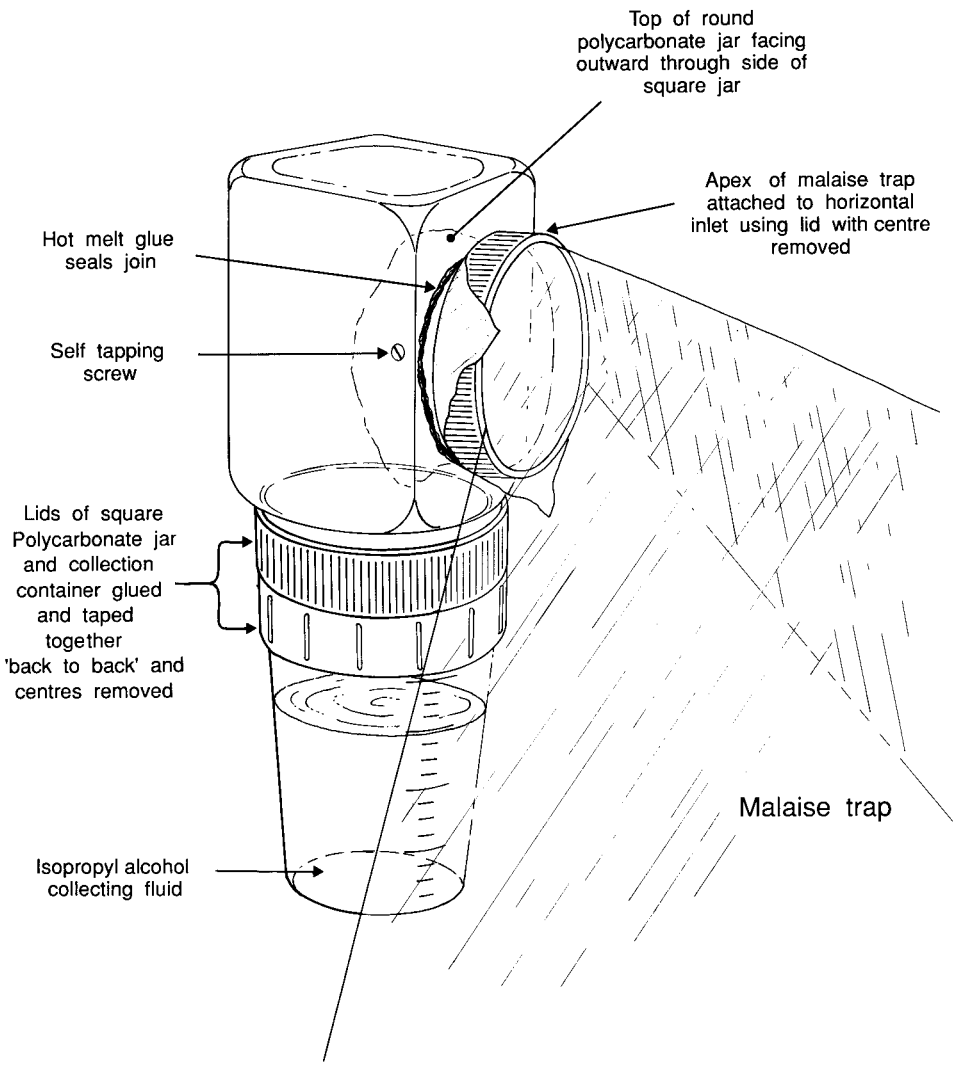

Fig. 1: Malaise trap.

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