Ectoparasite Collecting Device

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To facilitate the collection of ectoparasites from trapped rats, an ectoparasite collecting device has been made, utilizing the suction provided by the windshield wiping mechanism of an automobile (figure 1).

This apparatus makes it possible to collect ectoparasites in the field immediately after killing of the rodents in a cyanide jar. Ectoparasites collected can be segregated by individual rodent from which taken, or by location pools, merely by changing the collection bottle and labeling it. Separation and identification can then be accomplished in the laboratory in the usual manner. The collector enables personnel making rat surveys or conducting rat eradication to dispense with the pans, trays, combs. and files usually employed in the ectoparasite phase of their work. It also

eliminates the necessity of bringing ruts to the laboratory for combing at the end of the day, at which time the hair on many rodents has begun to slip as a result of decomposition.

In operation, the rat is held in the hand and gently combed by raking the comb back and forth over the rodent. The dislodged ectoparasites are sucked into the device.

The collecting device has been used on several rats which later were combed in the conventional manner without recovering additional ectoparasites. It has collected the following species: fleas - Nosopsyllus fasciatus and Ctenocepha-



Figure 1

lides felis; mites - Macrocheles spp.; and lice - Polyplax spinulosa.

Materials used in the construction of this vacuum device consisted of copper tubing, brass oil line fittings, a small valve, 150-mesh screen, rubber tubing, and a standard sputum bottle.** The mechanism was mounted on an aluminum disk which was attached to the dashboard of the automobile in the opening originally designed for a radio loudspeaker.

The new device should save much time and effort for personnel engaged in ectoparasite collection.

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^{**}Details on this device are available from the author upon request.