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# A GYNANDROMORPH OF Culiseta inornata (WILLISTON)

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There has been only one reported gynandromorph for the genus *Culiseta* (Brust 1966) and this was *C. annulata* (Shrank). This is a note of a gynandromorph of *C. inornata* taken 5 September 1968 in a New Jersey type light trap collection for the South Salt Lake County Mosquito Abatement District. Specimens of *C. inornata* comprise 20–25 percent of the total season's catch in this trap.

The antennae, tori, and eyes were typically male. The palpi were male, with five segments, but one palp was shriveled to about one-half the normal male length. The wings were the same size.

The external genitalia were female, as were the reproductive organs. The ovaries and spermathecae were normal.

The tarsal claws were as follows:

First pair of legs: One leg missing; one claw

much longer with two bristle-like spines; shorter claw with one bristle-like spine.

Second pair of legs: Claws of equal length; one pair had one claw with well-developed spine while the other pair of claws had no spines.

Third pair of legs: Tarsal claws of equal length but much shorter than on other legs.

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## BARLOW BOOSTER SUBMERSIBLE PUMPS

## Dennis Ramke, Manager

Tulare Mosquito Abatement District, Tulare, Calif. 93274

Since 1954 a submersible, portable 10-inch hydraulic pump known as the "Barlow Booster," <sup>1</sup> which can be operated from a power take off unit mounted on a Jeep or tractor, has been found by the Tulare MAD to be very useful where large volumes of water have had to be pumped. The "Barlow Booster" is expressly designed for portable, high volume, low lift pumping. Uses include drainage, irrigation and dewatering.

The pump is (Fig. 1, Fig. 2) constructed of fabricated steel material that will take the bumps and rough handling a portable pump must sustain and yet maintain the alignment and tolerance built into the pump. All models of the "Barlow Booster" are straight in design with a discharge length of 12 feet. Various types of extensions such as canvas or nylon socks can be used as an extension for specialized pumping jobs. The design of the pumping units makes it possible for one man to make a setting or even load the large pump for transport. The extremely flexible unit and pump, plus the absence of any long pump shafts—which could become misaligned or damaged, plus the lack of dead weight, make the "Barlow Booster" unique in the field of portable pumps.

The "Barlow Booster" is furnished in four standard sizes; the following are the specifications:

CPM of Water + See DD

Pump Size	GPM of Oil for 1800 RPM	GPM of Water 1800 RP		
		Max. P.S.I.	3 foot head	10 foot head
6"	6	1000	850	550
8"	15	1000	1850	1330
10"	26	1000	2550	2100
12"	42	1000	4000	3300

<sup>&</sup>lt;sup>1</sup> Manufactured by Barlow and Thompson, Tulare, Calif.