

mined, the species has not been recorded from this country except for a few localities in Texas.

During 1947 the writer made several collections of mosquitoes in Palmetto States Park, some eight miles south of Luling, Texas. A total of several dozen larvae of *Uranotaenia syntheta* in different larval instars were taken May 14, 22 and June 17. The larvae were found in small depressions along a stream that contained masses of water hyacinths. Larvae of *Culex salinarius* were also found in the same depressions, but no other species of mosquitoes were represented. The larvae of *U. syntheta* were brought into the laboratory, and although larval mortality was rather high, several adults of both sexes emerged.

These collections indicate that *U. syntheta* may not be as rare in parts of the United States as formerly supposed, and it is thought probable that more intensive collections in some areas will yield many specimens. It is possible, however, that special conditions are necessary for the breeding of the species in large numbers. The depressions mentioned above are the only places where larvae have been found,

although a large number of collections at different times of the year have been made in that vicinity. Larvae of *U. lowii* and *U. sapphirina* were collected from a grassy swamp less than 50 yards away, but no *U. syntheta* were recovered from this area.

Larvae of the same series from which adult *U. syntheta* were reared were compared with the description of the larva by Porter (1946). The larvae differed in some structures from this description, but these differences may well be individual variations that may be expected to be found in a series of most organisms. At present the writer is inclined to believe that the larva described by Porter was that of *U. syntheta*. The study of this species is continuing.

#### Literature Cited

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## HEDGES OF *BROMELIA PINGVIN* L. A SOURCE OF MOSQUITO BREEDING IN HAITI

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In a letter to the Secretary, Leon Dalencour, Civil Engineer and Specialist in Drainage, Rue Benito Juarez, 55, Port-au-Prince, Haiti, writes:

"I have resigned from the Malaria Control Section here in Haiti. My interest, however, did not decrease concerning the activities of any organization dealing with mosquito or malaria control; and I avail of the opportunity to send you the fol-

lowing communication which may prove of publication value.

"I was going to consider as a failure the extensive drainage work carried on by the Malaria Control Section so far as mosquito control is concerned in the town of Aquin, Haiti. Although decreasing, the outbreaks of mosquitoes were rather serious seven days after any rainfall and the remaining crab holes could not be

obviously accounted for such swarms. Finally came a long period of drought where the pests were very scarce in town. One afternoon I was hunting in a neighboring well-drained field when at my great surprise, I was followed by a few dozens of mosquitoes. These seemed to come from the thick bushes efficiently used as fence in that particular zone of the country. In fact, the bush is constituted by a densely growing herb called "Pingouin" by the natives. We identified

it as being the *Bromelia pinguin* L. of the Bromeliaceae family. Each leaf makes a cup at the place where it meets the stem and the dew accumulates there forming a well shaded and secluded ideal breeding basin.

"I am going to advise the Public Health Administration here so that a campaign may be initiated against this natural ally of the mosquito, in its unceasing fight towards human health."

(Signed) LEON DALENCOUR

## THE PLUMBER'S NIGHTMARE "GROWS UP" AND NOW HAS A "COLT"

(An example of the far-reaching influence of MOSQUITO NEWS, and of the desirability of publishing descriptions of your own new ideas for which someone likewise may be waiting.—*Editor's note.*)

Ted Raley, manager of California's Consolidated MAD recently received the following letter:

Dear Sir:

Thinking that you would be interested in some of the uses that have been made of the "Plumber's Nightmare" described by you in Vol. 7, No. 2 of MOSQUITO NEWS, I am forwarding pictures and information. When Dr. Reeves came to this station in connection with an investigation of possible encephalitis here on Guam, he brought along a copy of the above mentioned MOSQUITO NEWS. A more timely article could not have been obtained as we were doing everything we could to control adult mosquitoes, using "Fogging Jeeps," with very poor success. We had used two methods of DDT aerosol generation and neither was successful.

Here on the Medical Center, an area of several hundred acres, about  $\frac{2}{3}$  is jungle, we have a rather unique control problem. The species of mosquito which is most abundant is *Aedes pandanii*, which breeds in the axils of the Pandanus bush and tree. These grow profusely in

jungle areas that are inaccessible to any type of spray rig, making it necessary to practice adult control which you know is the hard way of controlling mosquitoes.

The first "Plumber's Nightmare" was used on a jeep with excellent results, followed by installation on a second. Due to the worn-out condition of the jeeps they lasted a couple of months as "foggers." As far as we could determine, the installation of the venturisi did not hasten the wearing. We next installed a venturi on a 115 H.P. 6x6 engine set on a trailer, this one was really a honey, gave excellent results. We used 2 inch pipe with a 1 inch venturi, putting out about 55 gallons of 10% DDT per hour. This motor also gave up, timing chain troubles, no replacements. At the present, we have a weapons carrier that is giving good results, both in larval and adult control.

We were able to control flies in the galleys in areas that could be hit by the aerosol but since we could not get overall coverage, using the vehicles, the kill was not as complete as was desired. With this in mind we decided to do a little experimenting. We took a one cylinder