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THE EFFECT OF CONTAMINATION UPON MOSQUITO LARVAE IN RAIN-WATER BARRELS

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For several years, six rain-water barrels located in a rather poorly-lighted place adjacent to a dense beech-maple forest in Cuyahoga County, Ohio served as favorite collecting spots for various species of mosquito larvae.

During the months of May and June, 1952, these barrels teemed with larvae of *Aedes triseriatus*, *Culex pipiens*, and *C. restuans*, with *A. triseriatus* dominating. On July first, the author accidentally upset the contents of a kitchen garbage container in one of the barrels. It was decided to continue making regular collections from all six barrels and note whether or not there would be any differences in the mosquito populations of the barrels. Following are the results of these observations.

July 1, 1952—All six barrels contained mosquito larvae in approximately these proportions: *A. triseriatus*, 6; *C. pipiens*, 2; *C. restuans*, 1. Added garbage to barrel number six only.

July 15, 1952—Barrels one to five still maintaining the proportion of larvae as described previously. Barrel number six very foul and odoriferous, no larvae present.

July 30, 1952—No apparent changes in the mosquito population of barrels one to five. Number six teeming with *C. pipiens* only.

September 3, 1952—Barrels one to five contained only *A. triseriatus*. Barrel number six contained only *C. restuans*.

September 14, 1952—Barrels one to five contained *A. triseriatus* and *C. pipiens* in the proportion of six to one. *C. restuans* had disappeared entirely.

Barrel number six teemed with *C. restuans* only.

September 20, 1952—Barrels one to five contained *A. triseriatus* and *C. pipiens* in the proportion of one to one.

Barrel number six teemed with *C. restuans*.

October 1, 1952—Barrels one to five contained *A. triseriatus* and *C. pipiens* in the proportion of one to one.

Barrel number six contained *C. restuans* only.

From these collections made during the summer of 1952, it looked as if the addition of the garbage to barrel number six immediately eliminated all larvae; then as it was diluted by rain *C. pipiens* first appeared only to be completely replaced by *C. restuans* which remained for the rest of the season. *A. triseriatus* never did reappear in barrel six, possibly because of the contaminating material present but it was speculative as to why *C. restuans* seemed to "prefer" the contaminated barrel only in which to breed after the first of July.