

ENTOMOLOGY

Track "Hot" Mosquitoes

Radioactivity is absorbed more by female mosquitoes than by male, study shows. "Tagged" insects also revealed that the female survives longer.

► FEMALE mosquitoes become more radioactive than their male companions reared in the same solutions of radio-isotopes. And nearly two-fifths of the radioactivity of these females is to be found in their legs, with practically none in their wings. Furthermore, the female of the species is much tougher than the male, in terms of survival: male insects tracked by means of their radioactivity lived only a few days, whereas the longest-lived females survived four weeks.

These are among newly-discovered facts of life among African yellow-fever mosquitoes, turned up by Drs. John C. Bugher and Marjorie Taylor at the Yellow Fever Research Institute at Lagos, Nigeria. They present a preliminary report on their research in the journal, *SCIENCE* (Aug. 5.)

Drs. Bugher and Taylor "tagged" large numbers of the yellow-fever mosquito, *Aedes aegypti*, by rearing them during the last stage of their larval development in photographic trays of water containing small amounts of the radioactive isotopes of phosphorus and strontium.

This work was done independently of a similar project carried out at the U. S. Army Chemical Center in Maryland, and reported recently by Drs. C. C. Hassett and D. W. Jenkins.

More than a quarter-million of these "hot" mosquitoes were released in field

tests at the Lagos laboratory. They were detected subsequently with Geiger counters when they alighted on volunteer human "bait" at various distances up to 3,800 feet—more than half a mile.

GENETICS

Lysenkoism Menaces U. S.

Spread of the anti-Mendelian genetics of Russia is believed by the editor of the *Journal of Heredity* to be a threat to us because of its appeal to some groups.

► THE anti-Mendelian genetics of Lysenko, now the official biological gospel in the USSR, have more of an appeal even in this country than many scientists appear to realize, warns Robert C. Cook, editor of the *JOURNAL OF HEREDITY* (July). Calling attention to the declared intention of the new masters of Soviet science to make their views prevail by any necessary means, he declares:

"Our ground-rules of tolerant give and take are not understood by those who explicitly deny any tolerance, who cynically accept naked and irresponsible force as the ultimate arbiter. To extend the usual human-canine amenities to a dog suffering

Direction and distance of mosquito flight is controlled more by the wind than by the insects themselves, Drs. Bugher and Taylor learned in the tests. Also, high winds and strong rains hamper mosquito activities and shorten the females' lives.

Very weak solutions of the radioactive salts sufficed to "tag" the mosquitoes. Stronger solutions were apt to harm the insects, first sign of such radiation injury being failure on the females' part to lay eggs. Microdissection of such non-reproductive females showed that their ovaries had failed to develop.

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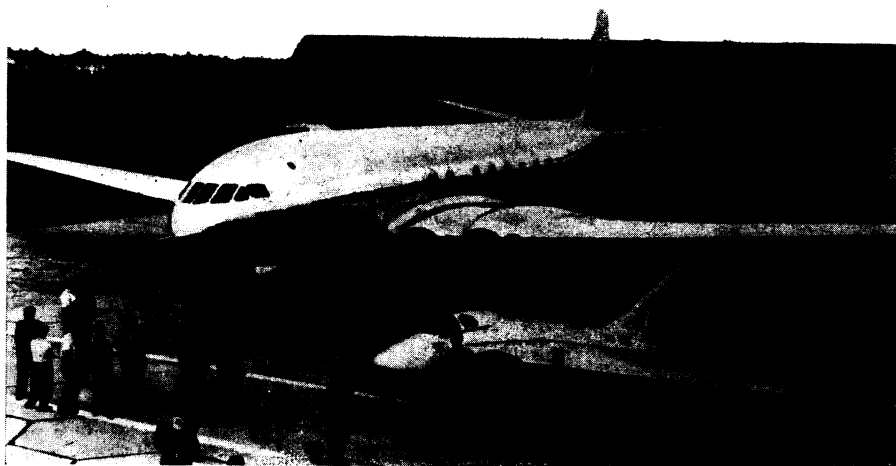
from hydrophobia is obviously to invite disaster. To pretend that this fulminating madness can be placated is stupid. If the new doctrine according to Marx prospers, we will find it very difficult to arrange a divided peace with it."

The people most likely to accept Lysenko's revival of the Lamarckian doctrine of environment-induced changes in heredity are the moderately well-read group who nevertheless know little or nothing about science, Mr. Cook holds. They harbor suspicions that genetics "is tainted with racism and somehow represents most of the worst features of P-esbyterian predestination." They are therefore prone to welcome any doctrine that promises to rid them of this dreaded though imaginary bogey.

Summing up in his long article the whole history of the dispute that raged in Soviet scientific circles for years until it was decided in Lysenko's favor by political decree in 1948, the editor indicts the Russian leader as essentially ignorant of the very science over which he now wields power. He states that Lysenko has consistently avoided contacts with such Western scientists as have been in Russia, and that one English geneticist who did manage to get an interview with him reported afterwards that it was "like trying to talk about integral calculus with a person who didn't know his twelve-times table."

Lysenko, the editor believes, is not a mere cynical opportunist, deliberately uttering nonsense and untruth for personal profit. More probably he is a sincere fanatic, ruthless in making others swallow what he has already swallowed. But that makes him all the more to be feared; he did not hesitate to ruin the career of his early friend and sponsor, Academician Nicolai Vavilov, now presumed dead.

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WORLD'S FASTEST AIRLINER—This is Britain's four-engine all-jet airliner, the de Havilland "Comet." It is a low-wing monoplane with a moderate swept-back wing and is expected to have a cruising speed of 500 miles per hour at 40,000 feet. The small jet in the foreground was used to determine wing resistance, stress and strain for the new airliner.