

ENTOMOLOGY

Glowing Clothes Repel

Experiments in Canadian forest show that luminescent satin is less attractive to mosquitos than other materials. Insects are also drawn to dark colors and perspiration.

► YOU CAN shop now to foil next summer's mosquitos. To keep them from attacking you, buy luminescent satin clothing. The pests are considerably less attracted to this material than to others tested for their drawing power.

Two robot dummies, dressed to resemble men and placed six feet apart in a Canadian forest furnished this and other valuable information on what to wear to be the least—or the most—attractive target for mosquitos.

Dr. A. W. A. Brown, zoologist at the University of Western Ontario, London, Canada, conducted the mosquito attraction tests for Canada's Defense Research Board and Department of Agriculture.

Next to luminescent satins, plain satins drew less than either broadcloths or crepes. Woven nylon clothing was considerably less of a lure than cotton shirts and drill trousers.

The drawing power was measured by counting the number of landings made by mosquitos in one and two-minute periods on the dummies. The robots were two stainless steel tanks, containing 100 pounds of water electrically heated to body or other desired temperature. For most of the tests Dr. Brown dressed the dummies in a crepe jerkin and a felt shirt. A head was added if necessary to test the effect of exhaling different gases.

Only one-tenth to one-quarter as many mosquitos alighted on the dummy dressed in white as on the one dressed in black. This was true no matter how light it was during the tests.

Green was less attractive than red or blue, and light reds and blues were less than half as attractive as the darker shades of the same colors. When dark shades of blue and red were compared red was more tempting to the mosquitos. However, light blue proved to be more of a drawing color than pink.

If the temperature is more than 60 degrees Fahrenheit and your clothes are wet, you will probably attract two to four times as many mosquitos as with dry clothing, according to the tests on the dummy. On the other hand, when the temperature is lower than 60 degrees and there is a lot of moisture in the air, dry clothing is twice as apt to attract mosquitos as moist.

As for lure of odors to mosquitos, a jerkin wet with human perspiration proved to have almost twice as much pull as a clean jerkin with an equal amount of moisture.

Clothing soaked with water that had been saturated with carbon dioxide presented no more allure to the pests than normal wet clothing. If, however, carbon dioxide was passed through the dummy's head at a rate and concentration equivalent to normal exhalation, the drawing power of both the head and body was raised 50%.

When pure carbon dioxide was "exhaled" by the dummy, twice as many mosquitos were lured to the body and three times as many to the head. The fumes of ether and of gasoline were also found to be attractive, whereas those of chloroform were significantly repelling to the mosquitos.

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AERONAUTICS

Tiny Fast New Plane Studies Speeds Near Sound

► A TINY airplane to explore flight conditions at speeds approaching that of sound is under construction by the Northrop Aircraft, it is now revealed. It is 20 feet long from nose to tail, and has a wingspan of 25 feet.

It might be called a "flying laboratory" because it is packed with scientific measuring instruments, including many developed by the National Advisory Committee for

Aeronautics to give stability and control. Space for the pilot is reduced to a minimum to provide room for all the instruments.

The plane is being built for the U. S. Air Force, and will be known as the Northrop X-4 research airplane. It is a lance-shaped craft, with a long pointed nose and a vertical tail piece. It has sweptback wings with square, instead of pointed, ends.

Its jet engines hug the fuselage on each side at the bases of the wings, with air-scoops to the right and the left of the pilot. Special construction is used in body and wings to provide safe housing for the many instruments the plane will employ.

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MEDICINE

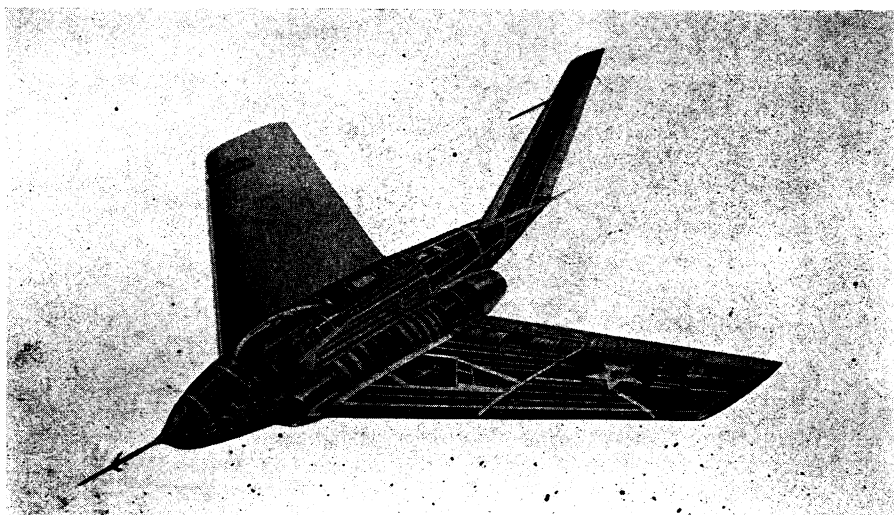
If Whale Hunting Were Popular, We'd Have ACTH

► IF WHALE hunting were as popular today as in the time of "Moby Dick" and the famous 19th century whalers, we might have more ACTH for painful, crippled arthritic joints.

This famous pituitary gland hormone has been obtained from whale pituitary glands, five Norwegian scientists report to NATURE, (Feb. 17). The five are Finn Boe, Hugo Holtermann, Sigbjorn Salvesen, Karl Fr. Stoa and Arne Sverdrup of the research department of Nyegaard and Co., Oslo.

Whale pituitary glands being considerably larger than the hog pituitaries from which most ACTH is now obtained, this would be good news but unfortunately there are not many whales and they are not hunted as much as formerly. Also the necessary freeze-drying of glands immediately after removal from the whale presents other practical difficulties.

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RESEARCH PLANE—20 feet in length and built for the U. S. Air Force, this little plane, shown here cut away, has space for many recording instruments and will be used to study flight conditions at high speeds.