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but it is suggested that dosages as high as 2lb. an acre should be avoided over water-courses and ponds, and the United States Fish and Game Service "recommends that in forest areas DDT spray be applied in concentrations of 1lb. an acre or less."

As far as the effect on insects goes, it was found that a fortnight after one area (of 117 acres) had been sprayed the insect population was again back to normal. What would happen if repeated fortnightly sprays were given is still unknown but it is probable that more than insects would ultimately be affected.

DDT in the Soil

Farmers should give heed to a warning issued by the United States Department of Agriculture (and quoted in the Australian bulletin) that "DDT is suitable for use as an insecticide only when properly prepared. It is not easy to formulate an insecticidal dust from commercial grade DDT," and "no effective method of removing DDT residues from plants or produce has been worked out." At present, the Department explains, DDT insecticides cannot be recommended for use on grain, forage, or other crops that are to be used as animal feed because of the possible danger associated with residues.

Extensive tests are now under way (in the United States) to find if DDT residues in soil have had any bad effects on crops. In preliminary tests, 25lb. of DDT to the acre, in the soil, retarded the growth of bush, lima and soya beans, hollyhock, onions, spinach, tomatoes, strawberry plants, and rye. But it would normally take several years to build up injurious quantities in the soil from such applications as would be necessary to control insect pests. The rate of decomposition of DDT in the soil has not yet been determined.

Big Moves Ahead in Africa

In South Africa, news of DDT as an insecticide was not available to entomologists until the end of 1943, and since the first useful samples did not come to hand until a year later research has so far been on a minor scale. Encouraging results, however, have been obtained with such divergent subjects as rose aphids, locusts, and bed-bugs. For the information of home gardeners it may be mentioned that while DDT dust was not much good against aphids, a spray of 2lb. of DDT (dissolved in hot alcohol) to 100 gallons of water compared well with the standard nicotine sulphate spray and no burning was observed.

These, however, are minor matters for South African entomologists, who in collaboration with the Union government's Division of Veterinary Science are planning an extensive experiment to test DDT sprays (applied by plane) over bush country in Zululand for the control of the tsetse fly. At the same time they hope to try DDT sprays on red locusts in adjacent areas and eventually find out what effect such wholesale spraying has on the "balance of nature." In particular, however, the effect on the parasites of the tsetse fly, carrier of the scourge of sleeping-sickness, will be carefully observed.

If science and DDT can together abate that pestilence it might not matter so much if Nature rocked slightly on her heels.