THE CONQUEST OF TYPHUS

To the wonder drugs of war medicine we must now add DDT, by which letters epidemiologists abbreviate dichlorodiphenyltrichloroethane, a house-killer which made it possible for the Army to save Naples from the ravages of typhus. Here we have another case of a lag between a discovery and its application. DDT was first synthesized in 1874 by a young student, Othmar Zehnder, of Strasbourg. It has taken nearly seventy years to discover its remarkable properties as an insecticide, and this after hundreds of different compounds had been tried against the typhus-carrying louse.

DDT seems almost too good to be true. It can kill the Japanese beetle, which has thus far resisted all efforts to control it; flies (spray walls with DDT and no fly will go near them for three months); moths of the fruit and clothes destroying variety; the boll weevil, mosquitoes, termites, fleas, bugs of any kind. Neapolitans are now throwing DDT at beetles instead of rice, runs the story. Maybe it is because nobody in Italy is wasting food these days: maybe it is because of gratitude. At any rate, it looks bad for agricultural pests as well as for all the insects that carry disease germs and inject them into the blood of animals and men. If the tales of DDT miracles are borne out, there ought to be no excuse for any insect-borne disease. A house-fly ought to become a curiosity; dogs ought to lead flealess lives of bliss.

Though the insecticidal properties of DDT were discovered in Switzerland in 1939, when the potato crops was threatened with destruction by the Colorado beetle, the scientists of the Rockefeller Foundation must be credited with the miracle performed in Naples and described in the Science Department of today's TIMES. With Rockefeller aid the Army set up mass delousing stations in Naples and treated 1,500,000 at the rate of 50,000 a day. DDT was sprinkled in clothes right on the person and did its house-repelling even after eight washings. Typhus, more dreaded than bullets in any army, is now simply unknown among our soldiers and sailors.

We have not heard the end of this story, by long odds. When the war is over, much of Europe will have to be deloused and immunized against typhus. It is not likely that the frightful ravages of typhus after the last war, when whole communities were decimated, will be repeated. We shall still have our regrets about the long delay in making the most of DDT after its first synthesis. It is the story of sulfinamide all over again—the story of a chemist who had synthesized what he thought was only a dye but which turned out to be the first advance made in chemotherapy since Ehrlich discovered 606. If there is any moral in this it is that half a dozen scientists working together as a team are more likely to make the utmost use of a new discovery than one prime domus of the laboratory.