Therefore, molecule for molecule, the DIDT would have to be rated more toxic than DDT; and DBrDT would be the most toxic of all as far as these fish were concerned. Very roughly speaking, the toxicity of this series tends to increase with the weight of the molecule.

Perhaps an even more interesting difference in the series is in regard to speed of action. When concentrations of comparative toxicity were prepared (DFDT, 1 ppm; DDT, 0.1 ppm; DBrDT, 0.1 ppm; DIDT, 0.166 ppm), the average time required to kill gambusia was as follows: DFDT, 4.5 hours; DDT, 7 hours; DBrDT, 16 hours; DIDT, 54 hours. Therefore, the speed of action was inversely correlated with the size of the molecule.

The effect of the p-halogen series on Culex larvae generally paralleled that on fish, with two exceptions. First, DBrDT was relatively more toxic to fish than to mosquito larvae as compared with DDT. Hansen, *et al.* (*4*) found DBrDT to be similar to DDT but less toxic to land insects. Second, DFDT was relatively more toxic to the larvae than to fish (Fig. 1). For this reason, DFDT may have possibilities as a larvicide; at least it seems worthy of field tests, especially in view of its rapid action.

Determinations of the residual toxicity of the analogue series are now being made, and the results will be reported in a subsequent paper.

References

1. CRISTOL, S. J., and HALLER, H. L. *Chem. eng. News*, 1945, **23**, 2070.
2. ELLIS, M. M., WESTFALL, B. A., and ELLIS, M. D. *Science*, 1944, **100**, 477.
3. GINSBURG, J. M. *J. econ. Entomol.*, 1945, **38**, 274.
4. HANSEN, E. L., HANSON, J. W., and CRAIG, R. *J. econ. Entomol.*, 1944, **37**, 853.
5. LEWIS, W. H., and RICHARDS, A. G. *Science*, 1945, **102**, 330.
6. SUMERFORD, W. T. *J. Amer. pharm. Ass.*, 1945, **34**, 259.
7. ———. The use of DDT in mosquito control. *Publ. Hlth Rep.* (Suppl. 186), 1945.

Association Affairs

Section Q (*Education*) will hold three regular sessions at the Boston meetings. On Friday morning, 27 December, papers will be presented by W. E. Hall, Nebraska; D. D. Durrell, Boston University; P. J. Rulon, Harvard University; C. W. Scott, Vocational Counseling Services of New Haven; and Francis H. Horn, Yale University. The Friday afternoon program will deal with implications of the armed services educational programs, with papers by M. M. Chambers, American Council on Education; Robert John Matthew, College of the City of New York; Elwood C. Davis, University of Louisville; and Howard Rusk, *The New York Times*. The third regular meeting, on Monday afternoon, will relate to various aspects of science teaching, with papers by Robert Stollberg, Wabash College; Paul Blackwood, The Ohio State University; Robert Wickware, Willimantic State Teachers College; Hubert Evans, Teachers College, Columbia University; and Benjamin C. Gruenberg, New York. Sections Q and I will have a joint session on Saturday evening, at which the vice-presidential addresses of the two sections will be given. Section Q is also cosponsoring several other special programs, including a symposium on scientific personnel, Saturday morning and afternoon, with Sections K, I, and B; a symposium on the teaching of ecology, Saturday afternoon, with the National Association of Biology Teachers; and a joint session with Section L, Monday morning, on "The Place of the History of Science."

Pi Lambda Theta, women's honorary educational society, affiliated with Section Q, will hold a dinner for members and guests in the Oval Room of the Bradford Hotel at 6:00 P.M., Monday, 30 December. Tickets may be obtained by writing to Mrs. Dorothy Larned, 154 Maynard Road, Framingham, Massachusetts. The price is $3.25, tax included.

The Section on Botanical Sciences will hold a joint meeting on Friday afternoon, 27 December, with the American Fern Society, American Society of Plant Physiologists, American Society of Plant Taxonomists, Botanical Society of America, Mycological Society of America, and Sullivant Moss Society, at which E. C. Stakman, chairman of the Section, will deliver his address, as retiring vice-president of the Association, on "The Nature and Importance of Physiologic Specialization in Phytopathogenic Fungi." This will be followed by a symposium on plans for union involving workers in the biological sciences. Paul J. Kramer, H. B. Tukey, Ralph E. Cleland, and R. F. Griggs will speak briefly on various aspects of the proposals, after which the meeting will be opened for questions and discussion.

The Society for Research in Child Development will hold meetings on 27–28 December. In addition to a business meeting on Friday, 27 December, there will be two symposia: "Methodological Problems Met in Integrating and Interpreting Physical, Medical, Psychological, and Social Data in Longitudinal Studies of Children," with Wayne Dennis presiding; and "Psy-

chological Problems Met in General Medical Practice With Children," with Arthur T. Jersild presiding. The Saturday morning session, 28 December, with Kurt Lewin presiding, will include nine research reports. Saturday afternoon will be devoted to the topic: "The Effects of Severe War Conditions Upon Child Development and Behavior," with Harold C. Stuart presiding. Frank Gollan will discuss "Child Health and Development and War." Dr. Gollan was scientific director of the Nutrition Mission to Italy sent out by the Unitarian Service Committee to make sample surveys of nutritional and epidemiological conditions throughout Italy and report to UNRRA.

Section I (Psychology) will meet on Saturday and Sunday, 28–29 December. Seventeen papers will be presented. Saturday morning and Sunday afternoon will be devoted to general psychology and Saturday afternoon to clinical psychology. Saturday evening the Section will meet jointly with Section Q to hear the addresses of the vice-presidents of both sections.

News and Notes

About People

The 1946 Nobel Prizes in physics and chemistry have been awarded to four American scientists, according to an announcement from Stockholm on 14 November.

P. W. Bridgman, of Harvard University, was selected for the physics award for his production of extremely high pressures and his discoveries of resulting effects of the pressures.

J. B. Sumner, of Cornell University, who isolated the first enzyme in 1926, received one half of the chemistry award for his distinguished research in the field of enzymology. The second half was awarded jointly to John H. Northrop and W. M. Stanley, of the Rockefeller Institute, Princeton, for their preparation of virus proteins in pure form.

Dr. Stanley was the recipient of the 1936 AAAS $1,000 Prize for his paper, "Some biochemical investigations on crystalline tobacco mosaic virus proteins."

As previously reported in *Science* (8 November, p. 440), H. J. Muller, of Indiana University was awarded the Nobel Prize in medicine and physiology on 31 October. Dr. Muller's work had been recognized by AAAS in 1927 whe he was cited for his paper "The influence of X-ray on genes and chromosomes."

H. K. Skramstad has been made chief of the Guided Missiles Section, National Bureau of Standards. This Section is concerned with the extended research and development of the advanced forms of guided missiles. The first fully automatic guided missile to be successfully used in combat by any nation was developed by the Section in close cooperation with OSRD, Massachusetts Institute of Technology, and the Navy Department. This missile is the recently declassified and much publicized BAT. Dr. Skramstad first went to the Bureau in 1935 as a physicist in the Aerodynamics Section. Until the outbreak of the war he was engaged in studies of wind-tunnel turbulence and the investigation of the stability of laminar flow, important in the mechanics of air flow over surfaces. In 1942, he became technical assistant in the development of guided missiles, playing a key part in the development of the BAT.

Robert E. Johnson became the technical director of the Army Medical Nutrition Laboratory at Chicago on 1 October, replacing George H. Berryman. Dr. Johnson has been associated with the Harvard University Fatigue Laboratory since 1935. Dr. Berryman was commanding officer and director of the Nutrition Laboratory from its activation in 1941 until he left to attend the University of Illinois Medical School.

Gordon A. Johnsgard has been named professor of soil science and soil scientist to the Experiment Station at the North Dakota Agricultural College, Fargo. Dr. Johnsgard was formerly with the Tennessee Valley Authority as agriculturist.

Nathaniel Coburn, formerly at the University of Texas, has been appointed assistant professor of mathematics at the University of Michigan. Dr. Coburn was a physicist at Laredo Army Airfield during the war.

Visitors From Abroad

Harald Cramér of the University of Stockholm will deliver a series of three lectures on "Some Aspects of the Theory and Applications of Random Movements," 4–6 December, under the auspices of the Institute of Statistics of the University of North Carolina at Chapel Hill. Random movements, or stochastic processes, and their applications in physics, biology and economics form one of the fields of particular concern of the new Department of Mathematical Statistics of the Institute. M. S. Bartlett of Cambridge University