

bility to pulmonary infections is due to abnormal respiratory mucus secretion, which is hereditary.

Crow has reiterated his concept of "genetic load". Several of his other statements need clarification for the reader: (p. 59) "The quantity $W_1 - \bar{W}$ is called the *average excess* of the allele A_1 ." The average excess is defined by Fisher (1930, 1941) for two alleles as $W_1 - W_2$ in the present notation. For multiple alleles, the *excess* concept proves inconvenient and is replaced by the *deviation* from general mean, namely, $W_1 - \bar{W}$. (p. 61) "An equilibrium may be unstable as well as stable." He means unstable *or* stable. (p. 65) "Persons who are very tall or very short have lower viability than persons of intermediate height." No supporting reference has been given, but Crow called my attention to an article entitled "Build and blood pressure study", (1959, Society of Actuaries). (p. 219) "... what is lethal now was not lethal a few generations ago." Apparently he said exactly the opposite of what he meant.

In discussing radiation effects on mice, Gowen presented data to show that radiation, up to a certain amount, has decreased the fertility of females but increased their longevity. Is this a beneficial or detrimental effect? Gowen's answer is simply: "This result will be considered favorable by some but not by others" (p. 193).

In discussing blood group and disease problems, Buckwalter says: "The findings did not indicate differences in frequencies of blood type between the patients and their controls of statistical significance in some instances. However, when the results are pooled, they indicate associations of statistical significance . . ." This seems a favorite target of attack for Wiener. Is the pooling justified? How is it to be done? For a symposium on methodology, these questions are more important than the associations claimed to be found.

In reading the reports and checking the references, I find the most annoying feature is the collectivized references. The only possible argument for this arrangement is that it avoids the duplication of references. This may lead to a very small saving of space, but it requires a tremendous amount of editorial labor which could be used more profitably. My objection to pooled bibliography, however, is more fundamental. The literature cited *is* an

integral part of the paper and should not be broken and intermingled with other unrelated references. One may argue that some other symposium volumes also have pooled bibliography, but that is no justification. Many others do not.

I enjoyed the meetings but I enjoyed reading the reports even more.

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New Books

Biological and Medical Sciences

About Biology. Karl von Frisch. Translated from the German by Elsa B. Lowenstein. Oliver and Boyd, Edinburgh, Scotland, 1962. 294 pp. Illus. 25s.

Advances in Agronomy. vol. 14. A. G. Norman, Ed. Academic Press, New York, 1962. 443 pp. Illus. \$13.

Animal Parasites, Their Biology and Life Cycles. O. Wilford Olsen. Burgess, Minneapolis, Minn., 1962. 353 pp. Illus. \$6.95.

Die Anwendung des Spalthautlappens in der Chirurgie. János Zoltan. Fischer, Jena, Germany, 1962. 391 pp. Illus. DM. 59.20.

Biochemistry of Mental Disease. Theodore L. Sourkes. Harper and Row, New York, 1962. 425 pp. Illus. \$12.

Botanical Histochemistry. Principles and practice. William A. Jensen. Freeman, San Francisco, 1962. 415 pp. Illus. \$10.

Brain and Behaviour in Cephalopods. M. J. Wells. Stanford Univ. Press, Stanford, Calif., 1962. 171 pp. Illus. \$4.50.

Chordate Morphology. Malcolm Jollie. Reinhold, New York; Chapman and Hall, London, 1962. 492 pp. Illus. \$8.75.

Design and Function at the Threshold of Life, the Viruses. Heinz Fraenkel-Conrat. Academic Press, New York, 1962. 124 pp. Illus. Plates. Paper, \$1.95.

Die enteralen Staphylokokken-Infektionen des Kindes. *Bibliotheca Microbiologica*, pt. 2. M. Kienitz. Karger, New York, 1962. 243 pp. Illus. Paper, \$10.60.

The Evolution of Man. G. H. R. von Koenigswald. Univ. of Michigan Press, Ann Arbor, 1962. 148 pp. Illus. Paper, \$1.95.

The Eye. vol. 2, *The Visual Process* (814 pp.); vol. 3, *Muscular Mechanisms* (339 pp.). Academic Press, New York, 1962. Illus.

Fortschritte der Zoologie. vol. 15, pt. 2. Max Hartmann, Ed. Fischer, Stuttgart, Germany, 1962. pp. 165-336. Illus. Paper.

Frontiers of Modern Biology. Twenty lectures originally broadcast over the Voice of America. Coordinated by Gairdner B. Moment. Houghton Mifflin, Boston, Mass., 1962. 207 pp. Paper, \$1.95.

Hochspannungselektrophorese. Ihre Anwendungsmöglichkeiten für biochemische und klinisch-chemische Trennprobleme.

Roman Clotten and Annemarie Clotten. Thieme, Stuttgart, Germany, 1962. 571 pp. Illus. DM. 98.

Human Heredity. C. O. Carter. Penguin Books, Baltimore, Md., 1962. 260 pp. Illus. Paper, \$1.45.

Interhemispheric Relations and Cerebral Dominance. Vernon B. Mountcastle, Ed. Johns Hopkins Press, Baltimore, Md. 1962. 304 pp. \$7.50.

Introduction to Herpetology. Coleman J. Goin and Olive B. Goin. Freeman, San Francisco, 1962. 350 pp. Illus. \$8.

Introduction to Mammalogy. E. Lendell Cockrum. Ronald, New York, 1962. 463 pp. Illus. \$9.

Laboratory and Field Manual for Introduction to Mammalogy. E. Lendell Cockrum. Ronald, New York, ed. 2, 1962. 121 pp. Illus. Paper, \$4.

The Life of Birds. Joel Carl Welty. Saunders, Philadelphia, 1962. 559 pp. Illus. \$9.

The Life Story of the Fish. His morals and manners. Brian Curtis. Dover, New York, 1962 (© 1949). 293 pp. Illus. Paper, \$1.50.

Mammals of the Mexican State of Durango. Rollin H. Baker and J. Keever Greer. Michigan State Univ. Museum, East Lansing, 1962. 129 pp. Illus. Paper.

Methods of Biochemical Analysis. vol. 10. David Glick, Ed. Interscience (Wiley), New York, 1962. 408 pp. Illus. \$14.50.

Methods of Forensic Science. vol. 1. Frank Lundquist, Ed. Interscience (Wiley), New York, 1962. 671 pp. Illus. \$19.95.

Morphologic and Systematic Relationships of Some Middle Ordovician Ostracoda. John C. Kraft. Geological Society of America, New York, 1962. 112 pp. Illus.

The Mosquitoes of the South Pacific (Diptera, Culicidae). vols. 1 and 2. John N. Belkin. Univ. of California Press, Berkeley, 1962. vol. 1, 620 pp.; vol. 2, 412 pp. Illus. \$20.

Natural History of Infectious Disease. Sir Macfarlane Burnet. Cambridge Univ. Press. New York, ed. 3, 1962. 387 pp. \$6.

Nutrition in a Nutshell. Roger J. Williams. Doubleday, Garden City, N.Y., 1962. 185 pp. Illus. Paper, \$0.95.

The Opium Alkaloids. Selected topics. David Ginsburg. Interscience (Wiley), New York, 1962. 111 pp. Illus. \$6.50.

The Organization of Cellular Activity. Ch. M. A. Kuyper. Elsevier, New York, 1962. 282 pp. Illus. \$7.

Primatologia. vol. 2, No. 1, pt. 3, *Volarhaut der Hände und Füße.* H. Hofer, A. H. Schultz, and D. Starck, Eds. Karger, New York, 1962. 326 pp. Illus. \$21.

Radioisotopes and Bone. Symposium held at Princeton, N.J., August-September 1960. Franklin C. McLean, P. Lacroix, and Ann M. Budy, Eds. Davis, Philadelphia, 1962. 545 pp. Illus. \$15.

A Revisional Study of the Masarid Wasps. (Hymenoptera, Vespidae). O. W. Richards. British Museum (Natural History), London, 1962. 301 pp. Illus. £5 15s.

Viruskrankheiten des Menschen. vol. 1, pts. 2 and 3. Eugen Haagen. Steinkopff, Darmstadt, Germany, 1962. pt. 2, pp. 113-224; pt. 3, pp. 225-336. Illus.