LETTERS

EDITORIAL
Science in the State Department

ARTICLES
Data Analysis and the Frontiers of Geophysics: J. W. Tukey
Insect Survival and Selection for Pattern: H. B. D. Kettlewell
Are Aptitude Tests Valid for the Highly Able?: H. Chauncey and T. L. Hilton

NEWS AND COMMENT

BOOK REVIEWS
On Teaching High School Chemistry: P. G. Ashmore

REPORTS
Aftershocks of the 4 February 1965 Rat Island Earthquake: J. N. Jordan, J. F. Lander, R. A. Black
Solar Activity during the First 14 Months of the International Years of the Quiet Sun: H. W. Dodson, E. R. Hedeman, F. L. Stewart
Periodic Compounds: Syntheses at High Pressures and Temperatures: H. T. Hall
Immunologic Tolerance in Thymectomized, Irradiated Rats Grafted with Thymus from Tolerant Donors: K. Isakovic, S. B. Smith, B. H. Waksman
Skin Grafts: Delayed Rejection between Pairs of Cattle Twins Showing Erythrocyte Chimerism: W. H. Stone et al.
Potassium-40 Content as a Basis for the Calculation of Body Cell Mass in Man: W. Burmeister ................................................................. 1336
Smooth Muscle: An Ultrastructural Basis for the Dynamics of Its Contraction: J. Rosenbluth ................................. 1337
Gallstones Produced Experimentally by Lithocholic Acid in Rats: R. H. Palmer ............................... 1339
Herpes-Like Virus Isolated from Neonatal and Fetal Dogs: S. E. Stewart et al. ................................. 1341
Separation and Partial Purification of Plasma-Membrane Fragments from Ehrlich Ascites Carcinoma Microsomes: V. B. Kamat and D. F. H. Wallach .................. 1343
Passive Transfer of the Action of Freund's Adjuvant by Serum of Rabbits Injected with the Adjuvant: D. L. Dawe, D. Segre, W. L. Myers ................ 1345
Response of the Rabbit Oviduct to a Tissue Adhesive: P. A. Corfman, R. M. Richart, H. C. Taylor, Jr. .... 1348
Hemoglobin and Oxygen: Affinities in Seven Species of Sciuridae: F. G. Hall .................. 1350
Control of Enzyme Activity in Growing Bacterial Cells by Concerted Feedback Inhibition: L. Burlant, P. Datta, H. Gest .................. 1351
Collagen: Structural Studies Based on the Cleavage of Methionyl Bonds: P. Bornstein and K. A. Piez .................. 1353
Altered Effect of Potassium Ions on Cerebral Respiration in vitro Following Subcortical Lesions: B. F. Roth and J. A. Harvey .................. 1356
Intracranial Reinforcement Compared with Sugar-Water Reinforcement: W. E. Gibson et al. .................. 1357
Age, Personality, and Somatosensory Cerebral Evoked Responses: C. Shagass and M. Schwartz .................. 1359
Sequential Behavior Induced Repeatedly by Stimulation of the Red Nucleus in Free Monkeys: J. M. R. Delgado .................. 1361

MEETINGS
Cellular Dynamics: The Cell Cycle: E. W. Taylor; Forthcoming Events .................. 1364

DEPARTMENTS
New Products: Instruments at the FASEB Show: D. J. Prager .................. 1366

COVER
Melanism in insects inhabiting industrial environments is one of the most striking evolutionary changes occurring today. Extensive investigations of Biston (Amphidasys) betularia (peppered moth) reveal that its black form, carbonaria, may constitute up to 98 percent of industrial populations. The black form has a 30-percent chance of survival over f. typica on blackened tree trunks. A mechanism may exist in the gene complex, and may insure dominance of the black form at each mutation. See page 1290. [H. B. D. Kettlewell, University of Oxford]