

INDEX TO VOLUME 63

- Adolescents, broken homes among, 30
 Alaska soils, strontium exchange characters of, 225
 Alexander, Richard D., 19
 Allison, James, 266
 Andresen, John W., 159
 Annual Report, Ohio Academy of Science, 166
 Anticancer compounds, potential, 97
 A Review of Nitrogen in the Tropics with Particular Reference to Pastures: A Symposium (Book Review), 144
 Arizona, southeast, *Pinus cembroides* in, 159
 Associate Editor, Ohio Journal of Science, Election of, 151
 A Study of the Food Habits of Some Lake Erie Fish (Book Review), 224
 Atchley, R., 97
 Athens County, Limnology of Dow Lake, 128
- Bats, flight mechanisms, 59
 Bean, George, 165
 Behaviour, sub-social, in burrowing crickets, 19; winter flocking, of crow, 145; of chlorpromazine-treated planaria, 290
 Bernhagen, Ralph J., book review by, 96, 289
 Bibliography of Ohio Geology (Book Review), 289
 Blood, method of obtaining from cockroach, 127
 Blue Hole (Miller), flora of, 113
 Bluegrass disease in northern Minnesota, 165
 Book Reviews
 A Review of Nitrogen in the Tropics with Particular Reference to Pastures: A Symposium, edited by a Committee, reviewed by J. L. Mortensen, 144
 A Study of the Food Habits of Some Lake Erie Fish, by John W. Price, reviewed by Thomas H. Langlois, 224
 Bibliography of Ohio Geology, by Pauline Smyth, reviewed by Ralph J. Bernhagen, 289
 Bulletin 60, Geology of Fairfield County, by Edward W. Wolfe, Jane L. Forsyth, and George D. Dove, reviewed by Ralph J. Bernhagen, 96
 Chordate Morphology, by Malcolm Jollie, reviewed by R. A. Hefner, 144
 College Arithmetic, by W. I. Layton, reviewed by Carl Vernard, 91
 Evolution and Genetics, by David J. Merrell, reviewed by R. A. Hefner, 240
 General Biology, by W. T. Taylor and R. J. Weber, reviewed by Carl Venard, 96
 Great Experiments in Biology, by Mordecai L. Gabriel and Seymour Fogel, reviewed by Thomas H. Langlois, 14
 Great Lakes Basin; Symposium, edited by Howard J. Pincus, reviewed by T. H. Langlois, 6
 Leeches (Hirundinea), their Structure, Physiology, Ecology, and Embryology, by K. H. Mann, reviewed by Charles C. Davis, 18
 Life in Fresh Water, by Edward J. Popham, reviewed by Thomas H. Langlois, 213
 Soils of the North Central Region of the United States, reviewed by Jane L. Forsyth, 38
 Study of the Earth, edited by J. F. White, reviewed by Thomas H. Langlois, 18
 Taxonomy and Bionomics of the Genus *Tetraopes* (Cerambycidae: Coleoptera), by John A. Chemsak, reviewed by Josef N. Knull, 240
 The Cerambycidae of North America, by E. Gorton Linsley, reviewed by Josef N. Knull, 224
 Boughey, A. S., 193
 Bridger Basin, stratigraphy of Green River formation in, 241
 Broken homes, among adolescents, 30
 Bulletin 60, Geology of Fairfield County (Book Review), 96
 Bulloff, Jack L., 43
 Byrsotria fumigata, obtaining blood from, 127
- Caffeines, synthesis as potential anticancer compounds, 97
 Cain, J. Allan, 7, 209
 Caley, Earle R., 92
 California, date cultivation in Coachella Valley, 82
 Cancer, potential anticancer compounds, 97
 Carnivores, Dracontiasis in, in Ohio, 1
 Chemically defined medium, factors affecting the production of Staphylocoagulase in, 232
 Chemsak, John A., book by, 240
 Chordate Morphology (Book Review), 144
 Cicadellidae, 258, 262
 Coachella Valley, California, date cultivation in, 82
 Cockroach, method of obtaining blood from, 127
 College Arithmetic (Book Review), 91
 Compleometric titration, a new type of, 92
 Compositae, cytogenic investigations of artificial *Helianthus giganteus* x *H. saliciformis*, 273
 Conservation (water) research in Ohio, 49
 Constitution, Ohio Academy of Science, 184
Corvus brachyrhynchos (crow), winter flocking behaviour, 145
 Crayfish, introduced, population expansion of, 266
 Cricket, sub-social behaviour, 19
 Crites, John L., 1
 Crow, common, winter flocking behaviour, 145
 Cuban burrowing cockroach, obtaining blood from, 127
 Cultivation of dates in Coachella Valley, California, 82
- Dambach, Charles, 106

- Date cultivation in Coachella Valley, California, 82
 Davis, Charles C., book review by, 18
 Day, Richard A., 217
 Daytime detection of stars, 281
 DeLong, Dwight M., 258, 622
Desmognathus wrighti (salamander), mental gland of, 25
Diplocardia longiseta, description of new species of earthworm, 15
 Dipsacaceae, of Ohio, 26
 Diptera (Schiomyzidae) in the northwest, 163
 Dolomite, with an efflorescence of hexahydrite, 152
 Dove, George D., book by, 96
 Dow Lake, limnology of, 128
 Dracontiasis, in Ohio carnivores and reptiles, 1
 Dracunculid taxonomic problem, 1
 Dracunculidae, dracontiasis in Ohio carnivores and reptiles, and the dracunculid taxonomic problem, 1
Dugesia tigrina (planaria), chlorpromazine-treated, observations on behaviour and reconstitution of, 290
- Ecology in Southern Rhodesia, 193
 Evolution and Genetics (Book Review), 240
- Farrohha, Sabri M., 92
 Flatworms (planaria), chlorpromazine-treated observations on behaviour and reconstitution of, 290
 Flight mechanisms of bats, 59
 Flocking behaviour of crows in winter, 145
 Flora of the Miller Blue Hole, 113
 Fogel, Seymour, book by, 14
 Foote, Benjamin A., 163
 Forsyth, Jane L., book by, 96; book review by, 38; election as associate editor of Ohio Journal of Science, 151
 Foster, Wilfred R., 152
 Frank, Glenn W., 55
 Freytag, Paul H., 258, 262
 Fungus in northern Minnesota, 165
Fusarium (fungus) in northern Minnesota, 165
- Gabriel, Mordecai L., book by, 14
 Gall, goldenrod gall moth, in Ohio, 65
 Gebel, Radames K. H., 281
 Gelechiidae, goldenrod gall moth, in Ohio, 65
 General Biology (Book Review), 96
 Geology of Fairfield County (Book Review), 96
 Geology, Precambrian geology of northeastern Wisconsin, 7
Gnorimoschema gallaesolidaginis (goldenrod gall moth), in Ohio, 65
 Goldenrod gall moth (*Gnorimoschema gallaesolidaginis*) in Ohio, 65
 Granodiorite pluton, mineralogical and specific gravity data from, 209
 Graue, Louis C., 214
 Great Experiments in Biology (Book Review), 14
 Great Lakes Basin: Symposium (Book Review), 6
 Green River formation, stratigraphy of, 241
- Grossi, Joseph C., Jr., 290
 Gryllidae, sub-social behaviour in burrowing crickets, 19
Gyponinae, studies of, 258, 262
- Haase, Bruce L., 145
 Harrold, Lloyd L., 49
 Hartman, Frank A., 59
 Hausser, Edward J., 26
 Hefner, R. A., book review by, 144; 240
Helianthus giganteus, artificial hybrid with *H. saliciformis*, cytogenetic investigations of, 273
Helianthus saliciformis, artificial hybrid with *H. giganteus*, cytogenetic investigations of, 273
 Hexahydrite, as an efflorescence on some Ohio dolomites, 152
 Holowaychuk, N., 225
 Homing pigeons, day-night cycle, 214
 Homoptera, 258, 262
 Hoover, Karl V., 152
 Hydrolysis, of univalent salts, 43
- Intensifier image orthicon, for daytime detection of stars, 281
 Interaction between animals, vegetation, and fire in southern Rhodesia, 193
 Intrusion of salt in northeastern Ohio, 55
 Irish, Donald P., 30
- Jollie, Malcolm, book by, 144
 Joseph, John M., 127
 Judis, Joseph, 232
- Knull, Josef N., book review by, 224; 240
- Langlois, Thomas H., book review by, 6; 14; 18; 213; 224
 Lawson, Reed, 87
 Layton, W. I., book by, 91
 Leaf area, a portable planimeter for measuring, 103
 Leafhoppers, studies of, 258, 262
 Learning in the rat, 87
 Lee, David R., 82
 Leeches (Hirundinea), their Structure, Physiology, Ecology, and Embryology (Book Review), 18
 Lepidoptera, goldenrod gall moth, in Ohio, 65
 Life in Fresh Water (Book Review), 213
 Limnology of Dow Lake, Athens County, 128
 Linsley, E. Gordon, book by, 224
 Long, Robert W., 273
- Mann, K. H., book by, 18
 Marcusiu, E. C., 225
Marganana, studies of, 258
 Marston, Richard B., 49
 McCormick, Jack, 159
 Megascolecidae, description of new species of earthworm, 15
 Merrell, David J., book by, 240
 Mettalia, Joseph B., Jr., 97
 Michigan Botanist, announcement, 96
 Microorganisms, penicillinase induction, 217
 Miller Blue Hole, flora of, 113
 Miller, William E., 65, 297
 Mineralogical data from a granodiorite pluton, 209
 Mortensen, J. L., 225; book review by, 144

- Moth, shortleaf pitch blister, 297
 Murchie, W. R., 15
- Nematoda, dracontiasis in Ohio carnivores and reptiles, and the dracunculid taxonomic problem, 1
 New species, *Diplocardia longiseta*, 15
 Northwest, Schiomyzidae (Diptera) in, 163
- Ohio Academy of Science, Annual Report, 166; Constitution, 184
 Ogotoruk Creek watershed, Alaska, strontium exchange characters in soils of, 225
 Ohio Journal of Science, election of associate editor, 151
 Oligochaeta, description of new species of earthworm, 15
Orconectes virilis, population expansion of, 266
 ORSANCO, 77
 Orthicon, intensifier image, for daytime detection of stars, 281
 Orthoptera, sub-social behaviour in burrowing crickets, 19
- Parasites of goldenrod gall moth, in Ohio, 65
 Penicillinase induction in microorganisms, 217
Petrova houseri, 297
 Pigeon homing, day-night cycle, 214
 Pincus, Howard J., book edited by, 6
 Pinkava, Donald J., 113
Pinus cembroides in southeast Arizona, 159
 Pitch-blisters moth, 297
 Planaria, chlorpromazine-treated, observations of behaviour and reconstitution of, 290
 Planimeter, portable, for measuring leaf area, 103
Poa pratensis (bluegrass) disease in northern Minnesota, 165
 Pollution, abatement augmenting water resources, 75
 Popham, Edward J., book by, 213
 Population expansion of introduced crayfish, 266
 Precambrian geology of northeastern Wisconsin, 7
 Price, John W., book by, 224
- Radioactivity of suspenoids in northwestern Ohio, 39
 Rat, learning in, 87
 Reconstitution of chlorpromazine-treated planaria, 290
 Reptiles, dracontiasis in, in Ohio, 1
 Rhodesia, Southern, interaction between animals, vegetation, and fire in, 193
 Rubelmann, Robert, 266
- Sack, Gerald E., 232
 Salamander, mental gland in, 25
 Salt intrusion in northeastern Ohio, 55
 Salts, Uni Univalent, hydrolysis of, 43
 Sandusky County, flora of Miller Blue Hole in, 113
 Schiomyzidae (Diptera) in the northwest, 163
 Schurr, Karl, 165
 Schwab, Glenn O., 49
- Schwartz, Frank J., 266
 Seibert, Henri C., 128
 Shah, Ramesh, 217
 Shortleaf pitch-blisters moth, 297
 Smyth, Pauline, book by, 289
 Soils of the North Central Region of the United States (Book Review), 38
 Southern Rhodesia, interaction between animals, vegetation, and fire in, 193
 Specific gravity data from a granodiorite pluton, 209
 Staphylocoagulase, factors affecting the production of, 232
 Stars, daytime detection of, 281
 Stokeley, Paul S., 290
 Stout, Norman B., 103
 Strontium exchange characteristics of Alaska soils, 225
 Study of the Earth (Book Review), 18
 Sunflowers, cytogenic investigations of artificial hybrid, 273
 Suspenoids, radioactivity of, in northwestern Ohio, 39
- Tarzwell, Clarence M., 75
 Taxonomy, discussion of the dracunculid problem, 1
 Taxonomy and Bionomics of the Genus *Tetraopes* (Cerambycidae: Coleoptera) (Book Review), 240
 Taylor, W. T., book by, 96
 Teasel family (Dipsacaceae), of Ohio, 26
 Textoris, Daniel A., 241
 The Cerambycidae of North America (Book Review), 224
 Theophyllines, synthesis of as potential anticancer compounds, 97
 Titration, complexometric, a new type of, 92
- UniUnivalent salts, hydrolysis of, 43
- Valentine, Barry D., 25
 Valerianaceae, of Ohio, 26
 Venard, Carl, book review by, 91; 96
 Verduin, Jacob, 39
- Ward, Ronald W., 128
 Water conservation research in Ohio, 49
 Water resources, augmentation of, through pollution abatement, 75
 Watson, Luke S., Jr., 87
 Weber, R. J., book by, 96
 West, Mary Jane, 19
 White, J. F., book edited by, 18
 Wildlife research, 106
 Wisconsin, Precambrian geology of northwestern part, 7
 Wolfe, Edward W., book by, 96
 Worms, description of new species of earthworm (diplocardian), 15; Nematodes, dracontiasis in Ohio carnivores and reptiles and the dracunculid taxonomic problem, 1
 Wyoming, stratigraphy of Green River formation in Bridger Basin of, 241
- Zimmer, Hans, 97
Zonana, studies of, 262