

RECENT LITERATURE ON LEPIDOPTERA

Under this heading are included abstracts of papers and books of interest to lepidopterists. The world's literature is searched systematically, and it is intended that every work on Lepidoptera published after 1946 will be noticed here. Papers of only local interest and papers from this *Journal* are listed without abstract. Readers, not in North America, interested in assisting with this very large task, are invited to write Dr. P. F. BELLINGER (Dept. of Natural Sciences, San Fernando Valley State College, Northridge, Calif., U. S. A.). Abstractors' initials are as follows:

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A. GENERAL

Forbes, William T. M., "Lepidoptera of New York and neighboring states. Part III. Noctuidae." *Mem. Cornell Univ. agric. Exp. Sta.*, no.329: 433 pp., 1 pl., 290 figs. 1954. Amounts to a revision of the Noctuidae of the northeastern United States. Subfamilies, genera, and species are described and keys to all categories are given. Known larvae are briefly described and foodplants listed (there is also an index to species by foodplant). [P. B.]

Ross, Herbert H., *A textbook of entomology*. 532 pp., 434 figs. New York: John Wiley & Sons. 1948.

F. BIOLOGY AND IMMATURE STAGES

Schütze, Eduard, "Über die Lebensweise der Raupe von *Acasis* (= *Lobophora appensa* Ev. (Lep. Geometridae). II. Mitteilung" [in German]. *Nachrichtenbl. bayer. Ent.*, vol.5: pp.97-100. 1956. Larva lives in rolled leaf or in web on berries of *Actaea spicata*. [P. B.]

Schultz, Victor G. M., "Neue Beiträge zur Schmetterlingskunde. Nr. 12. Eine ab ovo-Zucht von *Cacoecia unifasciana* Dup. (Lep. Tortricidae)" [in German]. *Zeitschr. wiener ent. Ges.*, vol.63: pp.73-80, 1 pl., 1 fig. 1952. Describes early stages & rearing; foodplant *Symporicarpos* (new record). [P. B.]

Schwenke, Wolfgang, "Unsicherheitsfaktoren bei der Kiefernspannerprognose und Möglichkeiten ihrer Überwindung. Mit einer Ermittlung der Nadelverbrauchsnotrmen und kritischen Zahlen von *Bupalus piniarius* L. und *Semiothisa liturata* Cl." [in German]. *Beitr. Ent.*, vol.2: pp.189-243. 1952. Outlines refined methods of predicting damage to pine stands by these spp. Amount consumed by larvæ is determined. [P. B.]

Schwenke, Wolfgang, "Untersuchungen zum Massenwechsel der Kiefernspanner *Bupalus piniarius* L. und *Semiothisa liturata* Cl. auf vergleichend-biozönotischer Grundlage" [in German]. *Beitr. Ent.*, vol.2: pp.1-55, 12 figs. 1952. Study of populations of these spp. in pine stands, by determining numbers of pupae. Different stands are classified floristically and the populations correlated with floristic & climatic factors. [P. B.]

Schwenke, Wolfgang, "Beiträge zur Bionomie der Kiefernspanner *Bupalus piniarius* L. und *Semiothisa liturata* Cl. auf biozönotischer Grundlage" [in German]. *Beitr. Ent.*, vol.3: pp.168-206, 2 figs. 1953. Data on pupal weight, time of emergence, number of eggs laid, length of egg & larval stages, & effects of environmental factors influencing these. [P. B.]

- Schwenke, Wolfgang, "Untersuchungen zum Massenwechsel der Kiefernspanner *Bupalus piniarius* L. und *Semiothisa liturata* Cl. auf vergleichend-biozönotischer Grundlage. II. Über die Faktoren, die die Populationsdichteunterschiede der beiden Spannerarten in verschiedenen Kiefernwaldtypen ausserhalb einer Massenvermehrung verursachen" [in German]. *Beitr. Ent.*, vol.4: pp.388-451, 2 figs. 1954. Detailed analysis of factors limiting population size, including physical factors, parasites, & predators; mortality in each stage determined & causes described. [P. B.]
- Schwenke, Wolfgang, "Vergleichende Untersuchungen über die Populationsdichte und einige sie regulierende Faktoren bei der Forleule (*Panolis flammea* Schiff.), den Kiefernspannern (*Bupalus piniarius* L. und *Semiothisa liturata* Cl.) und den Kiefernchwärmer (*Hyloicus pinastri* L.) auf des Grundlage einer Einteilung der Kiefernwälder in Waldtypen" [in German]. *Beitr. Ent.*, vol.4: pp.673-683. 1954. Comparative ecological study of 4 pine-feeding spp.; gives data on sex ratio, number of eggs, parasites & percent parasitized, & population density. [P. B.]
- Schwenke, W., Über Biozönosetypen, Populationstypen und Gradozöntypen. Ein Beitrag zur biozönologischen Fundierung der Massenwechsel- Erforschung der Insekten" [in German]. *Bericht über die Hundertjahrfeier der Deutschen Entomologischen Gesellschaft*: pp.106-117, 1 fig. Berlin: Akademie-Verlag. 1957. Review of factors favoring outbreaks of destructive insects, with special reference to lepidopterous pests. [P. B.]
- Schwenke, Wolfgang, "Über die räuberische Tätigkeit von *Formica rufa* L. und *Formica nigricans* Emery ausserhalb einer Insekten-Massenvermehrung (Hymenoptera: Formicidae)." [in German; English & Russian summaries]. *Beitr. Ent.*, vol.7: pp.226-246, 4 figs. 1957. Ants consumed considerable part of population of *Coleophora laricella* larvae in larches near nests. [P. B.]
- Schwerdtfeger, F., "Studien über die Massenwechsel einiger Forstsäädlinge. IV. Untersuchungen über den 'Eisernen Bestand' von Kiefernspanner (*Bupalus piniarius* L.), Forleule (*Panolis flammea* Schiff.) und Kiefernchwärmer (*Hyloicus pinastri* L.)" [in German]. *Zeitschr. angew. Ent.*, vol.34: pp.216-283, 23 figs. 1952. Study of the statistics of eclosion, and related phenomena, in these spp., with special reference to the "normal" populations existing between outbreak periods. Parasites and frequency of parasitization are listed. The deleterious effects of unfavorable weather are demonstrated; no definite correlation between weather and the beginning of outbreaks could be demonstrated. [P. B.]
- Schwerdtfeger, F., "Zum Begriff der Populationsdynamik" [in German]. *Beitr. Ent.*, vol.6: pp.461-464. 1956. Summary of concepts & parameters in population structure & fluctuation, illustrated by population of *Bupalus piniarius*. [P. B.]
- Sellier, Robert, "La viviparité chez les insectes" [in French]. *Année Biol.*, ser. 3, vol.31: pp.525-545, 5 figs. 1955. Mentions reports of viviparity in Tineidae & in alpine *Colias* & *Parnassius*; almost nothing is known about this phenomenon. [P. B.]
- Semel, M., "Polyhedrosis wilt of Cabbage Looper on Long Island." *Journ. econ. Ent.*, vol.49: pp.420-421. 1956. Reports very effective control of *Trichoplusia ni* by a virus wilt. [W. C.]
- Sengun, Atif, "Über die biologischen Bedeutung des Duftstoffes von *Bombyx mori* L." [in German; Turkish summary]. *Rev. Fac. Sci. Univ. Istanbul*, ser. B, vol.19: pp.281-286. 1954. Describes behavior involved in attraction of ♂ and mating, & discusses mode of action of ♀ scent. [P. B.]
- Sevastopulo, D. G., "On the food-plants of Indian Geometridae and Pyralidae." *Journ. Bombay nat. Hist. Soc.*, vol.47: pp.492-498. 1948. Foodplant records, original and from literature, for some 60 spp. of Geometridae and 90 of Pyralidae. [P. B.]
- Sevastopulo, D. G., "Pupation habits of African Saturniidae." *Ent. Rec. & Journ. Var.*, vol.65: pp.220-221. 1953. In spp. of *Bunaea*, *Lobobunaea*, & *Imbrasia*, pupation takes place in an underground cell; pupa wriggles out of extended larval skin, or remains in it if cell collapses (in loose soil). [P. B.]

- Sevastopulo, D. G., "Dorsal spines on noctuid pupae." *Ent. Rec. & Journ. Var.*, vol.66: p.256. 1954. Lists some spined spp. [P. B.]
- Sevastopulo, D. G., "Filed notes from East Africa.—VII." *Entomologist*, vol.87: pp.103-106. 1954. Including attraction of *Rhodogastria* spp. to *Senecio* flowers; migrations of *Glycesthes creona infida* & *Achaea thermopera*; relation between duration of larval life & adult seasonal form of *Melanitis leda africana*; existence of extra instar in ♀ larvae of Lymantriidae; courtship of *Precis clelia*; apparent distastefulness of *Rhodogastria* spp. to bats; etc. [P. B.]
- Sevastopulo, D. G., "Palpita (Margarodes) unionalis Hübner in Uganda." *Entomologist*, vol.88: pp.165-166. 1955. Describes larva & pupa; foodplants *Jasminum* spp. [P. B.]
- Sevastopulo, D. G., "Phytometra acuta Walker." *Entomologist*, vol.89: p.257. 1956. Notes on early stages and relationships of a recent British immigrant. [P. B.]
- Sevastopulo, D. G., "The 'Slug' caterpillar, *Parasa lepida* Cr., and its control." *Journ. Bombay nat. Hist. Soc.*, vol.53: pp.741-742. 1956. Records a wasp parasite. [P. B.]
- Shenefelt, Roy D., & Daniel M. Benjamin, "Insects of Wisconsin forests." *Univ. Wisc. Coll. Agric. Ext. Serv. Circ.* 500: 110 pp., 27 figs. 1955. Gives notes on biology of 92 spp. or groups of spp. of Wisconsin forest insects; included are 38 spp. of Lepidoptera. [C. R.]
- Shimizu, Shigeru, "Entomology of *Bombyx mori* L. (Bombycidae)" [in Japanese]. *Shin Konchu*, vol.2, no.6: pp.19-26, 10 figs. 1949.
- Sibold, Nannie V., "Granulosis of the Red-banded Leaf Roller." *Virginia Journ. Sci.*, vol.1: p.226. 1950. *Argyrotaenia velutinana*.
- Silver, G. T., "Studies on the Arboryitae leaf miners in New Brunswick (Lepidoptera: Yponomeutidae and Gelechiidae)." *Canad. Ent.*, vol.89: pp.171-182, 1 fig. 1957. Describes life history & control of *Argyresthia thuiella*, *A. freyella*, *A. aureoargentina*, & *Recurvaria thujella*. [P. B.]
- Silver, G. T., "Studies on the Silver-spotted Tiger Moth, *Halisidota argentata* Pack. (Lepidoptera: Arctiidae), in British Columbia." *Canad. Ent.*, vol.90: pp.65-80, 16 figs. 1958. Detailed description of all stages & biology; records parasites. Food-plants: conifers, especially *Pseudotsuga*. [P. B.]
- Singh, M. P., & D. K. McE. Kevan, "Notes on three common British species of agrotid moth. I. Longevity and oviposition." *Ent. Rec. & Journ. Var.*, vol.68: pp.233-235. 1956. *Triphaena pronuba*, *Agrotis segetum*, *Amathes c-nigrum*.
- Šíp, V., "Škody způsobené osenici na bramborech v r. 1944" [in Czech; Russian summary]. *Ochrana Rostlin*, vol.19/20: pp.88-90. 1948. About the danger caused by *Agrotis segetum* on potatoes in 1944. [J. M.]
- Sisojević, Pelagija, "Beitrag zum Studium der Rolle der Tachinen als Regulator der Populationsdichte des Schwammspinner" [in Serbian; German summary]. *Acad. serbe Sci. XXXI, Inst. Ecol. Biogeogr.* no.4: pp.63-92, 8 figs. 1953. Precise data on large role played by tachinid parasites in regulating *Lymantria dispar* populations. [C. R.]
- Skala, Hugo, "Über minierende Gelechiidae" [in German]. *Zeitschr. wiener ent. Ges.*, vol.35: pp.115-116, 1 pl. 1950. Describes mines of 35 Gelechiidae; figures many. [P. B.]
- Skala, Hugo, "Über Sackminer" [in German]. *Zeitschr. wiener ent. Ges.*, vol.35: pp.111-114, 2 pls. 1950. Gives 99 figures of larval cases or mines of *Coleophora* spp. [P. B.]
- Skala, Hugo, "Einige Blattminen aus verschiedenen Kleinfalterfamilien" [in German]. *Zeitschr. wiener ent. Ges.*, vol.62: p.182, 1 pl. 1952. Describes & figures mines made by larvae of some micros (Pyralidae, Tortricidae, Glyphipterygidae, Yponomeutidae, Plutellidae). [P. B.]
- Skell, Fritz, "Beitrag zur rationellen Zucht *quercus* L. (Lep. Sphing.)" [in German]. *Nachrichtenbl. bayer. Ent.*, vol.5: pp.75-78. 1956. Describes rearing. [P. B.]

- Smith, Kenneth M., "Virus diseases of insects." *Discovery*, vol.11: pp.175-178, 7 figs. 1950. Popular account; pathogens of various Lepidoptera. [P. B.]
- Smith, Kenneth M., "The polyhedral viruses." *Sci. Progr.*, vol.41: pp.441-417, 2 pls. 1953. Review of recent work on these parasites, mainly of Lepidoptera [P. B.]
- Smith, Kenneth M., "The structure of insect virus particles." *Journ. biophys. biochem. Cytol.*, vol.2: pp.301-306, 3 pls. 1956. Parasites of various lepidopterous larvae. [P. B.]
- Smith, Kenneth M., & C. F. Rivers, "Some viruses affecting insects of economic importance." *Parasitology*, vol.46: pp.235-242, 4 pls. 1956. Description of diseases of *Pieris brassicae*, *P. rapae*, *Melanchra persicariae*; list of 19 spp. of Lepidoptera with the type of virus disease known to attack each. [P. B.]
- Smith, Kenneth M., R. W. G. Wyckoff, & N. Xeros, "Polyhedral diseases affecting the larvae of the Privet Hawk Moth (*Sphinx ligustri*)."*Parasitology*, vol.42: pp.287-289, 1 pl. 1953. Larvae apparently infected with two virus diseases simultaneously; polyhedra described. [P. B.]
- Smith, Kenneth M., & N. Xeros, "Studies on the cross-transmission of polyhedral viruses: experiments with a new virus from *Pyrameis cardui*, the Painted Lady butterfly." *Parasitology*, vol.43: pp.178-185, 6 pls. 1953. Probably two viruses involved, producing nuclear and cytoplasmic polyhedroses respectively. Successful inoculations into a variety of Macrolepidoptera, of 10 families. [P. B.]
- Smith, Kenneth M., & N. Xeros, "A comparative study of different types of viruses and their capsules in the polyhedroses and granuloses of insects." *Parasitology*, vol.44: pp.400-406, 2 pls. 1954. Diseases of Lepidoptera.
- Smith, Kenneth M., & N. Xeros, "Electron and light microscope studies of the development of the virus rods of insect polyhedroses." *Parasitology*, vol.44: pp.71-80, 6 pls. 1954. Mainly on diseases of *Bombyx* & *Lymantria*.
- Smith, Owen J., "Western Grape Leaf Skeletonizer." *California Agriculture*, vol.9, no.8: p.7, 1 fig. 1955. Use of *Apanteles harrisinae*, *Sturmia harrisinae*, & an unknown virus against the larvae of *Harrisina brillians* in southern California. [W. C.]
- Smith, Owen J., Paul H. Dunn. & John H. Rosenberger, "Morphology and biology of *Sturmia harrisinae* Coquillett (Diptera), a parasite of the Western Grape Leaf Skeletonizer." *Univ. Calif. Publ. Ent.*, vol.10: pp.321-357, 25 figs. 1955. Parasite of *Harrisina brillians*. [P. B.]
- Smith, Ray F., D. E. Bryan, & W. W. Allen, "The relations of flights of *Colias* to larval population density." *Bull. ecol. Soc. Amer.*, vol.29: p.29. 1948. Abstract; *Colias eurytheme*.
- Smith, Ray F., & T. F. Leigh, "The influence of the microenvironment on the activity of *Colias philodice eurytheme* Boisduval." *Bull. ecol. Soc. Amer.*, vol.34: p.82. 1953. Abstract.
- Smith, Roger C., "Effects of high soil and air temperatures on certain alfalfa insects." *Journ. Kansas ent. Soc.* vol.29: pp.1-19, 7 figs. 1956. Experiments in liberating various alfalfa insects on the soil surface in hot sunlight, at temperatures from 120 to 150 degrees F. Time required to kill is recorded in detail. Lepidoptera considered were *Plathypena scabra*, *Colias philodice eurytheme*, *Caenurgina erechtea*, *Heliothis zea*, & *Loxostege similalis*. [W. C.]
- Sodeyama, Eishin, "Life-history of *Iratsume orsedice* Butler (Lycaenidae)" [in Japanese]. *Shin Konchu*, vol.4, no.13: pp.29-30. 1951. Foodplant: *Hamamelis japonica*. [T. I.]
- Söderberg, Erik, "Juncus beringensis Buch. and *J. arcticus* Willd, as hosts of *Coleophora caespittiella* Zeller" [in Swedish]. *Svensk botan. Tidskr.*, vol.45: pp.683-684. 1951.
- Soffner, J., "Sternha (Ptychopoda) eugeniata Mill." [in German]. *Zeitschr. wiener ent. Ges.*, vol.40: pp.291-292, 1 pl. 1955. Describes early stages & biology; foodplants: grasses, *Stellaria*, *Taraxacum*, *Sonchus*. [P. B.]

- Solomon, M. E., & Betty E. Adamson, "The powers of survival of storage and domestic pests under winter conditions in Britain." *Bull. ent. Res.*, vol.46: pp.311-355, 2 pls., 4 figs. 1955. Reports on cold hardiness of many insects, including 14 Lepidoptera (Phycitidae, Galleriidae, Gelechiidae, Oecophoridae, Tineidae. [P. B.]
- Sonian, Jinhaku, "On the life-history of *Boarmia selenaria* Schiff. var. *cretacea* Butler (Geometridae)" [in Japanese]. *Matsumushi*, vol.3: pp.71-75, 1 fig., 3 tables. 1949.
- Speyer, Walter, *Die tierischen Schädlinge des Stein- und Schalenobstes*. 5th ed. 44 pp., 14 figs.; *Die tierischen Schädlinge des Kernobstes*. 6th ed. 84 pp., 32 figs.; *Die tierischen Schädlinge des Weinstockes, der Beerensträucher und der Erdbeere*. 5th ed. 78. pp., 24 figs. [all in German]. Leipzig: Verlag Hachmeister & Thal. 1949? Small manuals of nut-tree, fruit-tree, and berry insects, including brief biological notes on many Lepidoptera. [C. R.]
- Speyer, W., "Kohlweisslings-Notizen" [in German]. *Zeitschr. Pflanzenkrankh.*, vol.62: pp.552-560, 5 figs. 1955. Gives records of flowers visited by *Pieris brassicae*, *P. rapae*, & *P. napi*. Notes on nature of attractant in foodplant for egg-laying ♀♀, development of ovaries, number of eggs laid, habits of larvae. Records microsporidian spores in larvae, pupae, & adults. [P. B.]
- Speyer, W., "Die Bedeutung Schleswig-Holsteins für den Massenwechsel des Grossen Kohlweisslings (*Pieris brassicae* L.)" [in German]. *Faunist. Mitt. Norddeutschland*, no.7: pp.17-20. 1956. Notes on foodplants & parasites. [P. B.]
- Speyer, W., "*Pieris brassicae* L. in den Dünen der Nordseeinsel Amrum" [in German]. *Zeitschr. Pflanzenkrankh.*, vol.63: pp.12-14, 3 figs. 1956. Larvae feed on *Cakile maritima* on sand dunes of North Sea island. Mortality probably heavy, from predation while larvae are crossing sand between scattered plants; pupation sites unsuitable. Population probably restored annually by immigrants. [P. B.]
- Stallings, Don B., & J. R. Turner, "Notes on *Megathymus polingi* (Megathymidae)." *Lepid. News*, vol.10: p.109. 1956.
- Stamm, Karl, "Ohrwürmer als Raupenvertilger" [in German]. *Zeitschr. Lepid.*, vol.3: p.50. 1953. Earwigs apparently feeding on larvae. [P. B.]
- Stauder, Fritz, "Der Kiefernknospentriebwickler (*Evetria buoliana* Schiff.) und die durch ihn verursachten Schäden im Saarland" [in German; French summary]. *Ann. Univ. Saraviensis*, vol.4: pp.165-170, 3 pls., 1 fig. 1955. Describes damage to pines; distinguishes results of feeding of several *Evetria* spp. [P. B.]
- Steffan, J. R., "Sur trois *Brachymeria* Westw. (Hym. Chalcididae) parasites de lépidoptères africains" [in French]. *Bull. Mus. nat. Hist. nat.*, Paris, vol.23: pp. 524-629, 1 fig. 1951. Describes parasites of *Platyedra gossypiella*, *Pyroderces simplex*, *Mometa zemiooides*, *Sylepta derogata* (all on cotton); of *Sphenarches caffer*; & of *Epiphora bauhiniae*. [P. B.]
- Steffan, J. R., "Note sur les espèces européennes et nord-africaines du genre *Mondontomerus* Westw. (Hym. Torymidae) et leurs hôtes" [in French]. *Bull. Mus. nat. Hist. nat.*, Paris, vol.24: pp.288-293, 2 figs. 1952. Records 1 sp. as parasite of several psychids & zygaenids, & another as hyperparasite on both Hymenoptera & Diptera in various Lepidoptera. [P. B.]
- Steiger, Luis, "(Lep.) *Attacus edwardsi* (White) und seine Zucht" [in German]. *Zeitschr. wiener ent. Ges.*, vol.40: pp.87-90, 1 pl. 1955. Describes rearing; figures larvae & adult. [P. B.]
- Steiger, Luis, "(Lep.) *Citheronia brissotii* (Boisduval), ein interessanter Südamerikaner" [in German]. *Zeitschr. wiener ent. Ges.*, vol.40: pp.124-127, 2 pls. 1955. Describes early stages & rearing (on privet); figures larvae & adults. [P. B.]
- Steinhaus, Edward A., "Living insecticides." *Sci. Amer.*, vol.195, no.2: pp.96-100, 102, 104, 10 figs. 1956. History of attempts to use disease in insect control, and account of successful use of virus against *Colias* attacking alfalfa. [P. B.]
- Steinhaus, Edward A., "Microbial control - the emergence of an idea. A brief history of insect pathology through the nineteenth century." *Hilgardia*, vol.26: pp.107-160, 11 figs. 1956.

- Steinhaus, Edward A., "Microbial diseases of insects." *Annual Rev. Microbiol.*, vol.11: pp.165-182. 1957. Reviews recent literature on bacterial, fungal, & protozan diseases, and on use of these and of virus diseases in insect control; references to many pathogens of Lepidoptera. [P. B.]
- Steinhaus, Edwa d A., "New records of insect virus diseases." *Hilgardia*, vol.26: pp.417-430, 16 figs. 1957. Includes diseases of various Lepidoptera. [P. B.]
- Stephens, June M., "Disease in Codling Moth larvae produced by several strains of *Bacillus cereus*." *Canad. Journ. Zool.*, vol.30: pp.30-40, 3 figs. 1952. Disease of *Carpocapsa pomonella*, normally transmitted by feeding. [P. B.]
- Steyskal, George, "Insects feeding on plants of the *Toxicodendron*-section of the genus *Rhus* (Poison Oak, Ivy, or Sumac)." *Coleopt. Bull.*, vol.5: pp.75-77. 1951. Including *Nepticula rhoifoliella*. [P. B.]
- Stofberg, F. J., "Larval structure as a basis for certain identification of False Codling Moth (*Argyroloce leucotreta*, Meyr.) larvae," *Journ. ent. Soc. southern Africa*, vol.11: pp.68-75, 4 figs. 1948. Detailed description of larva, with figures of setal pattern & other characters; comparative notes on *A. peltastica*. [P. B.]
- Stokoe, W. J., & G. H. T. Stovin, *The caterpillars of British moths, including the eggs, chrysalids and foodplants*. 2 vols. 408 & 381 pp., 90 & 51 pls., figs. London: Frederick Warne & Co., Ltd. 1948. See review in *Lepid. News*, vol.3: p.38.
- Storck, E., "Sur les traces de Fabre" [in French]. *Bull. Soc. ent. Mulhouse*, 1947: pp.29-33, 44-49. Independent demonstration that ♂ of *Saturnia parvonia* perceives ♀ scent by means of antennae and can find her only from downwind. [P. B.]
- strojny, Wladyslaw, "Some observations on the biology of *Laspeyresia corollana* Hb. (Tortricidae)" [in Polish; English & Russian summaries]. *Bull. ent. Pologne*, vol.24: pp.147-156, 1 fig. 1956.
- strokov, V. V., "Nasekomye — pervichnye vrediteli dubov v g. Sochi i ego okrestnostakh" [in Russian; The primary injurious insects on oaks on the city of Sochi and its vicinity]. *Ent. Obozrenie*, vol.32: pp.69-75. 1952. Records & describes injury caused by some insects, 8 Lepidoptera among them. [N. O.]
- Stuart, A. M., "Ephialtes brevicornis (Grav.) as an external parasite of the Diamond-back Moth, *Plutella maculipennis* (Curt.)." *Bull. ent. Res.*, vol.48: pp.477-488, 13 figs. 1957. Describes biology & early stages of this ichneumonid; records other hosts, including Lepidoptera of 8 families. [P. B.]
- Sugi, Shigero, "Notes on larva and pupa of *Gabala argentata* Butler (Phalaenidae)" [in Japanese]. *Insect Ecology*, vol.2: pp.61-64, 1 pl. 1948. Foodplant: *Rhus javanica*. [T. I.]
- Sugi, Shigero, "The life-history of *Eutelia geyeri* Felder (Phalaenidae)" [in Japanese]. *Insect Ecology*, vol.3: p.24. 1950. Foodplant: *Rhus*. [T. I.]
- Sugi, Shigero, "The food-plants of *Sarrothripus revayana* Scopoli in Japan (Phalaenidae)" [in Japanese]. *Insect Ecology*, vol.3: p.56. 1951. Foodplant: *Populus* sp. [T. I.]
- Sugi, Shigero, "A feeding plant of *Pagyda quinquelineata* Hering (Pyralidae)" [in Japanese]. *Insect Ecology*, vol.4, no. 11: p.74. 1952. *Callicarpa japonica* (Verbenaceae) reported. [T. I.]
- Sugi, Shigero, "On some lichenophagous Acontiinae from Japan (Phalaenidae)" [in Japanese; English summary]. *Tinea*, vol.1: pp.19-21. 1953. 2 spp. of *Enispa* & 4 spp. of *Corgatha* listed. [T. I.]
- Sugi, Shigero & Toshiro, "Life-history of *Hadjina biguttula* Motschulsky (Phalaenidae)" [in Japanese; English summary]. *Insect Ecology*, vol.3: pp.87-89, 3 figs. 1951. Foodplant: *Bidens frondosa* (Compositae). [T. I.]
- Sugi, Toshiro, "Life-history of *Nymphalis xanthomelas* D. & S. (Nymphalidae)" [in Japanese]. *Collecting & Breeding*, vol.9: pp.234-239, 245, 2 figs.; vol.10: pp.1-6-116, 6 figs. 1947, 1948. Foodplant: *Celtis chinensis*. [T. I.]
- Sugi, Toshiro, "Foodplant of *Parallelia arctotaenia* Guenée (Phalaenidae)" [in Japanese]. *Insect Ecology*, vol.2: p.64. 1948. Foodplant: *Ricinus communis*. [T. I.]

- Sundby, Ragnhild, "Studies on the leaf-mining moth, *Phyllocnistis labyrinthella* Bjerk. I." *Nytt Magasin Zool.*, vol.1: pp.98-128, 15 figs. 1953. Describes all stages & biology, with comparative notes on *P. suffusella*; both feed on *Populus* spp., *P. labyrinthella* especially on *P. tremula* (not attacked by *suffusella*). [P. B.]
- Swain, H. D., "The British history, distribution, & life history of *Parascotia fuliginaria*, the Waved Black Moth." *Ent. Gaz.*, vol.1: pp.186-200, 11 figs., 2 maps. 1950. Good description and figures of all stages. Larvae feed on various bracket fungi. [P. B.]
- Swezey, O. H., "Insect fauna of a coconut tree." *Proc. Hawaiian ent. Soc.*, vol.14: pp.377-378. 1952. Records *Omiodes blackburni* & *Agonoxena argaula*, with parasites reared from them, & *Decadarchis minuscula*, associated with mealy bugs on palm. [P. B.]
- Symes, H., "Some observations on *Coscinia cibrum* L." *Ent. Rec. & Journ. Var.*, vol.63: pp.203-204. 1951. Rearing experiences.
- Symes, H., "Some notes on breeding *Dasychira fascelina* L." *Ent. Rec. & Journ. Var.*, vol.64: pp.42-44. 15 Feb. 1952.
- Symes, H., "Observations on the larva of *Nola albula* Schiff." *Ent. Rec. & Journ. Var.*, vol.65: pp.247-249. 1953. Habits; foodplant *Rubus caesius*. [P. B.]
- Symes, H., "Notes on the larva of *Apatura iris* Linn." *Ent. Rec. & Journ. Var.*, vol.66: pp.40-43. 1954.
- Symes, H., "A note on the life-history of *Brachionycha sphinx* Hufn." *Ent. Rec. & Journ. Var.*, vol.67: pp.49-53. 1955.
- Symes, H., "Notes on the maple-eating Prominents." *Ent. Rec. & Journ. Var.*, vol.67: pp.113-116. 1955. Biology & distribution of *Lophopteryx cucullina* & *Ptilophora plumigera*, in Britain. [P. B.]
- Symes, H., "Notes on *Xylomiges conspicillaris*." *Ent. Rec. & Journ. Var.*, vol.67: pp.250-251. 1955. Notes on rearing.
- Symes, H., "Some experiences with the larva of *Apatele alni* Linn." *Ent. Rec. & Journ. Var.*, vol.67: pp.314-316. 1955.
- Symes, H., "Some observations on *Papilio machano* L." *Ent. Rec. & Journ. Var.*, vol.67: pp.220-222. 1955. Oviposition & early stages. [P. B.]
- Symes, H., "Notes on rearing *Eumichtis lichenea* Hub." *Ent. Rec. & Journ. Var.*, vol.68: pp.297-299. 1956.
- Symes, H., "Some notes on *Calophasia lunula* Hufn." *Ent. Rec. & Journ. Var.*, vol.68: pp.201-202. 1956. Biology & range extension. [P. B.]
- Szmidt, Alfred, "A little-known moth *Tmetocera laricana* Hein. (*Tmetocera ocellana* F. v. *laricana* Hein.)" [in Polish; Russian & English summaries]. *Bull. ent. Pologne*, vol.21: pp.128-139, 4 figs. 1951. Describes the life-history. [J. M.]
- Szulczewski, J. W., "The zoococcidia of Gorzow-Ziemia Lubuska" [in Polish; English & Russian summaries]. *Prace Komisya biol., Poznanskie Tow. Przyjaciol Nauk*, vol.14, no.1: 38 pp. 1953. Catalogue of galls of various insects, including *Acalla ferrugana* (on *Betula*), *Conchilia hilarana* (on *Artemisia*), *Evetria resinella* (on *Pinus*), & *Chamoesphecia triannuliformis* (on *Rumex*). [P. B.]
- Tabuchi, Yukio, "Wintering eggs, larvae and pupae of butterflies" [in Japanese]. *Kagaku Asahi*, vol.13, no.12: p.3, 5 col. photos. 1953.
- Tabuchi, Yukio, "Searching after alpine butterflies" [in Japanese]. *Kagaku Asahi*, vol.11: pp.20-21, 5 figs. 1951. Life-history of *Oeneis asamana*, *Erebia ligea*, *E. niphonica*, *Colias palaeno*, & *Limenitis populi*. [T. I.]
- Takahashi, Akira, "An example of hibernating *Lampides boeticus* L. (Lycaenidae) with some notes on ab. *yanagawaensis* Hori" [in Japanese]. *Insect Ecology*, vol.3: pp.35-36. 1950.
- Tabuchi, Yukio, "Life-history of *Oeneis asamana* Matsumura (Satyridae)" [in Japanese]. *Kagaku Asahi*, vol.12: pp.56-59, 20 figs. 1952. Excellent gravure photos disclose life of this Japanese Arctic completely. [T. I.]
- Tabuchi, Yukio, in: *My mountain journeys - a photographic album*. 128 pp. Tokyo. 1952. 7 photos on the life-history of *Colias palaeno*, *Limenitis populi*, *Oeneis asamana*, *Erebia ligea*, & *E. niphonica* (pp.62-65). [T. I.]

- Tabuchi, Yukio, "Life of 'alpine' *Colias palaeno sugitanii* Esaki (Pieridae)" [in Japanese]. *Kagaku Asahi*, vol.13, no.11: pp.60-63, 15 figs. 1953. Full of fine photo--gravures. Foodplant: *Vaccinium* sp. [T. I.]
- Takahashi, Akira, "Morphology and classification of the pupae of *Limenitis camilla japonica* Ménétriers, and *L. glorifica* Fruhstorfer (Nymphalidae)" [in Japanese]. *New Entomologist*, vol.1, no.1: pp.19-21, 2 figs. 1951. Some points of distinction were found between these two sibling white admirals. [T. I.]
- Takahashi, Akira, "Notes on the larva and pupa of *Mycalesis gotama fulginia* Fruhstorfer (Satyridae)" [in Japanese]. *New Entomologist*, vol.1, nos. 3/4: pp.24-26, 5 figs., 1 table. 1952. Foodplants: grasses. [T. I.]
- Takahashi, Akira, Koichi Takita, & Toshio Kawauchi, "On the life-history of *Neozephyrus ataxus kirishimaensis* Okajima (Lycaenidae)" [in Japanese; English summary]. *Konchu*, vol.19, nos.3/4: pp.33-37, 1 pl. 1952. Foodplants: *Cyclobalanopsis* spp. [T. I.]
- Takakura, Tadahiro, "Rearing *Limenitis populi jezoensis* Matsumura (Nymphalidae)" [in Japanese]. *Shin Konchu*, vol.6, no.12: pp.6-8, 11 figs. (10 in frontispiece). 1953. Foodplant: *Populus* sp. [T. I.]
- Tamura, Sakae, *Closeups on insects - a book of photographs in life* [text in Japanese with sparse English]. ca. 200 pp., ca. 300 photos, 7 in color. Tokyo. 1951. Life-history of some 50 species of Lepidoptera, mostly butterflies, including fine photos of *Niphanda* larvae with nursing ants and *Celastrina* larvae with milking ants. Also insects of other orders. [T. I.]
- Tamura, Sakae, "Life-history of *Niphanda fusca*" [in Japanese]. *Kagaku Asahi*, vol.10: pp.48-51, 13 figs. 1951. Excellent gravure photos of ova, larvae, & pupae, showing fascinating symbiosis of the blues and ants (ref. Nagayama's original paper in *Insect Ecology*, vol.3, 1950). [T. I.]
- Tanada, Yoshinori, "A microsporidian parasite of the Imported Cabbageworm in Hawaii." *Proc. Hawaiian ent. Soc.*, vol.15: pp.167-175, 2 figs. 1953. Describes disease of *Pieris rapae* caused by *Perezia mesnilii*. [P. B.]
- Tanada, Yoshinori, "Description and characteristics of a granulosis virus of the Imported Cabbageworm." *Proc. Hawaiian ent. Soc.*, vol.15: pp.235-260, 5 figs. 1953. Describes new species of *Bergoldia* attacking, & apparently confined to, *Pieris rapae*, and the disease produced. [P. B.]
- Tanada, Yoshinori, "Susceptibility of the Imported Cabbageworm to *Bacillus thuringiensis* Berliner." *Proc. Hawaiian ent. Soc.*, vol.15: pp.159-166, 1 fig. 1953. Describes course of disease in *Pieris rapae*. [P. B.]
- Tanada, Yohrinori, "Field observations on a microsporidian parasite of *Pieris rapae* (L.) and *Apanteles glomeratus* (L.)." *Proc. Hawaiian ent. Soc.*, vol.15: pp.609-616. 1955.
- Tanada, Yoshinori, "Susceptibility of the Imported Cabbageworm to fungi: *Beauveria* spp." *Proc. Hawaiian ent. Soc.*, vol.15: pp.617-622, 3 figs. 1955. Diseases of *Pieris rapae*.
- Tanada, Y., "An annotated list of infectious diseases of insects in Hawaii. Part II." *Proc. Hawaiian ent. Soc.*, vol.16: pp.149-155. 1956. Includes diseases of *Plutella maculipennis*, *Hellula undalis*, *Trichoplusia ni*, *Omiodes accepta*, *Pieris rapae*, *Blepharomastix acutangulalis*, *Pseudaletia unipuncta*, & *Vanessa cardui*. [P. B.]
- Tanada, Y., "Size of a granulosis virus of *Pieris rapae* (L.)." *Proc. Hawaiian ent. Soc.*, vol.16: pp.156-157. 1956.
- Tanada, Yoshinori, "Some factors affecting the susceptibility of the Army Worm to virus infections." *Journ. econ. Ent.*, vol.49: pp.52-57. 1956. First & second instar larvae of *Pseudaletia unipuncta* more susceptible than larger larvae. Large larvae succumbed to a mixture of two viruses, when neither alone was very effective. [W. C.]
- Taylor, F. J., "Biological flora of the British Isles. *Carex flacca* Schreb." *Journ. Ecol.*, vol.44: pp.281-289, 2 figs. 1956. Records 3 spp. of *Elachista* mining leaves, and *Phothedes captiuncula* (Noctuidae) in heart. [P. B.]

- Taylor, J. Sneyd, "Some observations on 'assembling'." *Journ. ent. Soc. southern Africa*, vol.10: pp.179-181, 1 fig. 1948. Describes attraction of males by ♀ *Gynanisa maia* (Saturniidae); reared from acacia; figures adult. [P. B.]
- Taylor, J. Sneyd, "Notes on Lepidoptera in the eastern Cape Province." *Journ. ent. Soc. southern Africa*, vol.12: pp.78-95, 2 pls., 1 fig. 1949. Describes larvae (food-plants in parentheses) of the following: *Phytometra exquisita* (*Euryops spathaceus*), *Polydesma quenavadi* (*Acacia*), *Euproctis fasciata* (*Acacia*), *Gynanisa maia* (*Acacia*), *Bunaea alcinoe* (*Cussonia spicata*), *Anadiasa punctifascia* (*Acacia*), & *Bombycopsis indecora* (*Pentzia incana*). Foodplant records & notes on larvae for 41 other spp. (Papilionidae, Nymphalidae, Danaidae, Hesperiidae, Amatidae, Arctiidae, Noctuidae, Lymantriidae, Sphingidae, Striphnopterygidae, Notodontidae, Geometridae, Lasiocampidae). Adults of most spp. figured. [P. B.]
- Taylor, J. Sneyd, "Notes on the life-history of a species of *Mesocelis* (Lasiocampidae) with special reference to its parthenogenesis." *Journ. ent. Soc. southern Africa*, vol.13: pp.53-67, 1 pl. 1950. Describes all stages, including wingless ♀, which does not leave cocoon. Sp. compared to *M. montana* (bisexual). Brief review of parthenogenesis in Lepidoptera. [P. B.]
- Taylor, J. Sneyd, "British Sphingidae in South Africa." *Ent. Rec. & Journ. Var.*, vol.63: pp.16-18. 1951. Notes on occurrence & biology of 5 spp. [P. B.]
- Taylor, J. Sneyd, "Notes on Lepidoptera in the eastern Cape Province (Part II)." *Journ. ent. Soc. southern Africa*, vol.14: pp.94-126, 2 pls., 1 fig. 1951. Foodplant records & more or less complete descriptions of early stages of 67 spp. (Pieridae, Nymphalidae, Danaidae, Lycaenidae, Amatidae, Arctiidae, Noctuidae, Lymantriidae, Sphingidae, Striphnopterygidae, Geometridae, Lasiocampidae, Limacodidae, Zygaenidae, Pyralidae, Epipaschiidae, Eucosmidae, Blastobasidae, Hyponomeutidae, Ethmiidae, Tineidae). Development of *Amata polydora*, (foodplant *Mestoklema*), with wingless ♀, is most completely described. Adults of most spp. figured. [P. B.]
- Taylor, J. Sneyd, "Notes on Lepidoptera in the eastern Cape Province." *Journ. ent. Soc. southern Africa*, vol.16: pp.143-167, 4 pls. 1953. Foodplant records & more or less complete descriptions of early stages of 44 spp. (Lycaenidae, Arctiidae, Noctuidae, Lymantriidae, Hypsidae, Sphingidae, Notodontidae, Geometridae, Lasiocampidae, Limacodidae, Pyralidae, Pterophoridae, Tortricidae, Tineidae). Adults of most spp. figured. [P. B.]
- Taylor, J. Sneyd, "An asilid predator of *Dira clytus* (L.)." *Ent. Rec. & Journ. Var.*, vol.69: pp.225-226. 1957. Fly captures south African satyrid. [P. B.]
- Tawfik, M. E. S., "Host-parasite specificity in a braconid, *Apanteles glomeratus* L." *Nature*, vol.179: pp.1031-1032, 3 figs. 1957. Eggs of this parasite of *Pieris brassicae* (& many other Lepidoptera) provoke cellular reaction lethal to themselves in body cavity of *Mamestra brassicae*. [P. B.]
- Templin, E., "Auftreten des Eichenprozessionsspinner und Vorschläge zu seiner Bekämpfung" [in German]. *Wald*, vol.2: pp.124-126, 4 figs. 1952. Biology & control of *Thaumatopea processionea*. [P. B.]
- Teucher, G., "In welchem Entwicklungsstadium überwintert der Kiefernspanner?" [in German]. *Wald*, vol.3: pp.283-284. 1953. Biology of *Bupalus piniarius*; larvae winter in ground, changing to pupae during winter. [P. B.]
- Thomann, H., "Die Gäste des Blasenstrauchs" [in German]. *Ent. Nachrichtenbl.*, Burgdorf, vol.3: pp.128-129. 1950. Records larvae feeding on *Colutea arborescens*: *Lycena (Polyommatus) boeticus*, *L. cyllarus*, *Colias edusa* (new foodplant record), *Laspeyresia nebritana*. Notes on biology. [P. B.]
- Thomson, M. G., "Appraisal of Western Hemlock Looper infestations." *Forestry Chron.*, vol.33: pp.141-147, 1 fig. 1957. *Lambdina fiscellaria lugubrosa*; notes on biology. [P. B.]
- Tischler, W., "Die Überwinterungsverhältnisse der landwirtschaftlichen Schädlinge" [in German]. *Zeitschr. angew. Ent.*, vol.32: pp.184-194. 1950. Lists wintering stage & habits of some important agricultural pests in Germany, including Lepidoptera. [P. B.]

- Tokuyasu, K., "Structures and the development of Silkworm polyhedra" [in English; German summary]. *Enzymologia*, vol.16: pp.62-68, 2 pls., 1 fig. 1953. Pathogen of *Bombyx mori* [P. B.]
- Tollet, Roger, "Mycetophilidae et autres arthropodes hivernant dans les tiges creuses des *Heracleum*" [in French]. *Bull. Ann. Soc. ent. Belg.*, vol.89: pp.210-213. 1953. Records *Depressaria heracliana* larvae hibernating in dry stalks. [P. B.]
- Tolman, Rinke, "Hadena bicruris Hufn." [in Dutch]. *Ent. Berichten*, vol.15: p.23, 1 fig. 1954. Notes on biology. [P. B.]
- Treat, Asher E., "A pseudoscorpion on moths." *Lepid. News*, vol.10: pp.87-89. 1956.
- Tripp, Howard A., & Alan F. Hedlin, "An ecological study and damage appraisal of White Spruce cone insects." *Forestry Chron.*, vol.32: pp.400-410, 10 figs. 1956. Biology of *Laspeyresia youngana*; records of several other Lepidoptera attacking cones. [P. B.]
- Troníček, Edvard, "Dauer des Eierstadiums bei Schmetterlingszuchten im geschlossenen Raum und im Freien" [in Czech; German & Russian summaries]. *Folia zool.*, vol.6(20): pp.163-168. 1957. Egg-duration of some spp. in natural and laboratory conditions. [J. M.]
- Trought, Trevor, "The egg and life history of *Enconista exustaria* Staudinger (Lepidoptera: Geometridae)." *Entomologist*, vol.87: pp.199-200. 1954. Sp. from Jordan valley; foodplant *Retama raetam*. [P. B.]
- Trought, Trevor, "The life history of *Thaumatopoea jordana* Staudinger." *Ent. Rec. & Journ. Var.*, vol.66: pp.198-191, 1 pl. 1954. Describes egg & larva; foodplant *Rhus tripartita*. Sp. from Jordan Valley. [P. B.]
- Trought, Trevor, "Description of the larva of *Paracotis syntropha* Prout from Jordan (Lep. Geometridae)." *Entomologist*, vol.89: pp.243-247, 1 pl., 1 map. 1956. Foodplant *Rhus tripartita*. Species previously known only from Somaliland. [P. B.]
- Tsujita, Mitsuo, "Cytoplasmic polyhedral virus infecting the Silkworm." *Proc. Japan Acad.*, vol.31: pp.93-98, 6 figs. 1955. Pathogen of *Bombyx mori*. [P. B.]
- Turček, F. J., "Die Vögel bei der Massenvermehrung der Eichenwickler (*Tortrix viridana* und *T. loefflingiana*) in den Wäldern des mittleren Gran-Tales" [in Slovak; Russian & German summaries]. *Biológia*, Bratislava, vol.10: pp.498-507, 3 figs. 1955. 69 spp. of birds are listed as predators of these two spp. in Slovakia. Interesting ecological study made at time of mass occurrence of these tortricids in S. Slovakia. [J. M.]
- Turček, Fr. J., *Mniška velkohlavá* [in Slovak]. 60 pp., 17 figs. Bratislava: Slovenské vyd. podohospodárskej literatúry. 1956. Describes biology and control of *Lymantria dispar*, a pest in southern and eastern part of Slovakia. For forest entomologists. [J. M.]
- Turček, F.-J., "A propos de deux ennemis importants des ravageurs des glands" [in French]. *Schweiz. Zeitschr. Forstwesen*, vol.108: pp.194-196, 2 figs. 1957. *Laspeyresia splendana* larvae extracted from acorns and eaten by jays & voles. [P. B.]
- Uchida, Toichi, "Ein neuer Schmarotzer des Japanischen Ringelspinners (Hym., Ichneumonidae, Cryptinae)" [in German]. *Mushi*, vol.26: pp.17-18. 1954. Describes new parasite reared from *Malacosoma neustria testacea*. [P. B.]
- Uchida, Toichi, "Ein neuer Schmarotzer der Kartoffelmotte in Japan (Hymenoptera, Ichneumonidae)" [in German]. *Mushi*, vol.30: pp.29-30. 1957. Describes new parasite reared from *Gnorimoschema operculella* & *Chloridea assulta*. [P. B.]
- Ueda, Susumu, "Some notes on the parasitism of *Iseropus attaci* (Habermehl) (Hym.: Ichn.) on the Lappet Moth, *Gastropacha quercifolia* (Linné)." *Trans. Shikoku ent. Soc.*, vol.4: pp.131-132. 1956. Reports that ♀ moth emerged, laid eggs, and survived for 2 weeks, although 47 adults of this parasite and 12 braconids emerged from larva. [P. B.]
- Ueda, Susumu, "Miscellaneous notes on some Ichneumonidae of Shikoku (hymenopterous notes, VIII)." *Trans. Shikoku ent. Soc.*, vol.5: pp.62-64. 1957. Records parasites on *Psilogramma increta*, *Parnassius stubbendorfi*, *Malacosoma neustria*, *Trisuloides sericea*, *Pieris rapae*, & *Carposina nipponensis*. [P. B.]

- Ver. Naturkunde* 61: 79 - 80. (Placed in synonymy of *N. semialata* by Covell, 1963.)
4. *C. salapia* (Druce), NEW COMBINATION. Colombia.
Hasodima salapia Druce, 1900, *Annals & mag. nat. hist.*, ser. 7, vol.5: 522.
 5. *C. arana* (Dognin), NEW COMBINATION. Colombia, Peru, Bolivia, Argentina.
Caripeta arana Dognin, 1896, *Ann. soc. ent. Belgique* 39: 117.
Erilophodes arana (Dognin), Warren, 1909, *Nov. zool.* 16: 109.
Neodesmodes arana (Dognin), Covell, 1963.
 6. *C. muscosa* (Dognin), NEW COMBINATION. Colombia.
Neodesmodes muscosa Dognin, 1911, *Hétérocères nouv. Amér. Sud*, fasc.III: 38.
 7. *C. pruna* (Dognin), NEW COMBINATION. Colombia, Ecuador, Peru, Bolivia.
Bryoptera pruna Dognin, 1892, *Le Naturaliste*, 1 March 1892: p.59.
Hasodima puta Druce, 1900, *Annals & mag. nat. hist.*, ser. 7, vol.5: 522. NEW SYNONYMY.
 8. *C. dardania* (Druce), NEW COMBINATION. Colombia.
Hasodima dardania Druce, 1900, *Annals & mag. nat. hist.*, ser. 7, vol.5: 521.

In addition to these species, others from Latin America may belong in *Cargolia*. The author hopes to carry on more detailed investigation of this genus and others closely related to it, studying the biology and ecology of species as well as morphology.

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References Cited

- Covell, C. V. Jr., 1963. A revision of the Neotropical genus *Erilophodes* (Lepidoptera: Geometridae). *Annals entomol. soc. Amer.* 56: 835-844.
- Druce, H., 1898. *Biologia Centrali Americana, suppl.*, vol.2: 533; vol.3: pl. XCIII, figs. 23-24.
- Rindge, F. H., 1961. A revision of the Nacophorini (Lepidoptera, Geometridae). *Bull. Amer. mus. nat. hist.* 123: 113.
- Schaus, W., 1901. New species of Geometridae from tropical America, part II. *Trans. Amer. ent. soc.* 27: 249-250.

CORRIGENDA FOR VOLUMES 16 AND 17

Vol. 16:

p. 106, left column — words in last two boxes should be reversed; thus, the lower left box should be "Habitat preference".

- p. 119, in 3rd horizontal data row — “62”, “3.75”, “3.76”, and “4.9583” should be “52”, “3.71”, “3.76”, and “4.9585”.
- p. 123, 1st and 4th lines from bottom, and p. 124, 2nd line from top — “ F_3 ” should be “ F_1 ”.

Vol. 17:

- p. 109, bottom — line omitted just above mail address:
“9. *Adopaea lineola*: VI-10-59, Stevenson, Baltimore Co.”
- p. 168, 16th line from bottom — “♀ *P. protonor* × ♂ *P. helenus*” should be “♀ *P. polytes* × ♂ *P. helenus*”.
- p. 193, 3rd line from bottom — “Zucht *quercus*” should be “Zucht von *Marumba quercus*”.
- p. 195, 20th line from bottom — “524-629” should be “624-629”.
- p. 198, 20th line from bottom — “Yohrinori” should be “Yoshinori”.

A MEXICAN SATYRID AT LIGHT

In view of the recent increased interest in Rhopalocera being attracted to light it is appropriate to note an addition to the body of information on this subject.

A large lepidopteron was taken at some time very near 9:00 pm, Pacific Standard Time, 14 November 1952, at San Blas, Nayarit, Mexico. It was sitting on the ceiling of an outdoor corridor about two feet from a yellow light of the insect-repelling type. The location was a hotel there (the only modern one at that time) on the south edge of town. The place the specimen was taken faced jungle which was about three hundred feet away. The Pacific Ocean was about two hundred feet in the opposite direction.

This specimen was recently identified, with the aid of Dr. C. L. Remington, as *Taygetis mermeria* Cramer, probably form *excavata*. Identification was based on figures in Seitz' *Macrolepidoptera of the World*, Volume 5. The specimen has been placed in the Peabody Museum of Natural History at Yale University.

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BOOK NOTICE

THE DYNAMICS OF EPIDEMIC SPRUCE BUDWORM POPULATIONS. Edited by R. F. Morris. Canadian Entomologist, Memoir 31, 332 pp., numerous textfigs., graphs, & halftone plates. May 21, 1963. Paper and cloth.

The spruce budworm, *Choristoneura fumiferana* (Clem.) (Tortricidae) probably is the most intensively studied species of Lepidoptera in North America, if not in the world. Its tremendous outbreak capabilities and resultant economic importance to Canadian foresters precipitated a myriad of detailed studies on numerous aspects of its bionomics during the past 20 years.

This monograph is a series of closely related papers presenting the results of population studies on the spruce budworm. It is an attempt to ascertain and model mathematically where possible, the mode of action of the principal variables affecting density of the species. Major topics covered include general bionomics; development of outbreaks; analysis of survival and reproduction in both unsprayed and sprayed areas; a discussion of the major factors and processes affecting the bionomics, including dispersal, hosts and host conditions, parasites, predators, diseases, and insecticides. In all, twelve authors are contributors. — EDITOR