

RECENT LITERATURE ON LEPIDOPTERA

Under this heading are listed each month papers on Lepidoptera from all the scientific journals which are accessible to us and our cooperating abstractors. It is hoped that eventually our coverage of the world's literature will be virtually complete. It is intended that every paper and book published after 1946 will be included. Abstracts give all new subspecies and higher categories, with type localities and genotypes. Papers of only local interest are merely listed. Papers devoted entirely to economic aspects will be omitted. Reprints are solicited from all publishing members. Initials of cooperating abstractors are as follows: [P.B.] - P. F. BELLINGER; [A.D.] - A. DIAKONOFF; [G.dL.] - G. DE LATTIN; [Y.O.] - Y. OKADA; [C.R.] - C. L. REMINGTON; [T.S.] - T. SHIRÔZU. A complete set of these pages, for clipping and filing, may be obtained for Vol. 4 and Vol. 5 and a subscription for Vol. 6 for \$ 0.50 per volume.

A. GENERAL WORKS

- Döring, E., *Byfalter. Aus dem Leben der Schmetterlinge* [in German]. 120 pp., 2 pls. 1949. [Not seen]
- Nolte, H. W., *Der Kohlweissling. Aus dem Leben eines Tagfalters* [in German]. Brehm-Bücherei. 43 pp., figs. 1949. [Not seen]
- dos Passos, C. F., "On the present trend of the American lepidopterology" [translated into Japanese]. *Butt. and Moths (Trans. Lep. Soc. Japan)*, vol. 1: pp. 40-41. 1950.
- Warren, B. C. S., "On the present trend of the British lepidopterology" [translated into Japanese]. *Butt. and Moths (Trans. Lep. Soc. Japan)*, vol. 2: pp. 6-8. 1951.

B. SYSTEMATICS AND NOMENCLATURE

- Ferreira d'Almeida, R., "Nota rectificativa e adicional sobre algunos tipos de generos e sobre a nomenclatura de alguns grupos superiores publicados por nós em 1942, 1943 e 1944" [In Portuguese]. *Revista Ent.*, vol. 21: pp. 223-224. [10] Aug. 1950. Corrections to several earlier papers. *Platysamia* a synonym of *Hyalophora*; *Synchloe* and *Tatochila* are valid genera (the latter for 'a group of American species'). Several notes on genotypes (Pieridae, Mimallonidae, Mechanitidae). [P.B.]
- Bradley, J. D., "On the occurrence of *Tinea columbariella* Wocke (Lep. Tineidae) in England, with a description of the species." *Entomologist*, vol. 83: pp. 169-172, 4 figs. Aug. 1950.
- Dasse, G., "Genitalia de Cuculliinae (Agrotidae)" [in French]. *Lambillionea*, vol. 49: pp. 127-128, 1 pl. 25 Dec. 1949. Figures ♂ genitalia of 6 Belgian spp. of *Cucullia*. [P.B.]
- Diakonoff, A., "De genusnaam *Enarmonia* Hübn. versus *Ernarmonia* (Microlepidoptera, Eucosmidae)" (in Dutch). *Verslag 106e Zomervergadering Ned. Ent. Vereniging*: pp. LXII-LXIII. 15 May 1952.
- Diakonoff, A., "Notes on cave-dwelling Microlepidoptera with description of a new genus and species from East Java (family Oinophilidae)." *Zool. Mededelingen*, vol. 31: pp. 129-137, figs. 1-7. 20 Dec. 1951. Describes *WEGNERIA* gen. nov., with type: *cavernicola* spec. nov. [A.D.]
- Diakonoff, A., "Records and descriptions of Microlepidoptera (5)". *Zobl. Mededelingen*, vol. 31: pp. 165-178, figs. 1-12. 11 Feb. 1952. Separates a new Tortricoid family SCHOENOTENIDAE, type genus: *Schoenotenes* Mëyrick; discusses affinities, gives key to genera and describes four new species of *Diactenis*: *thauuma*, *sequax*, *plumula*, and *isotima* (type locality: East Java). [A.D.]
- Ferguson, Douglas C., "Collecting a little-known Papilio." *Lep. News*, vol. 4: pp. 11-12. [May] 1950.
- Herbulot, C., "Sur la détermination des *Agdistis*" [in French]. *Lambillionea*, vol. 50: pp. 16-19, 1 pl. 25 Feb. 1950. Figures ♂ 8th sternite of 11 spp. Notes on several spp. of uncertain identity. [P.B.]

- Hoffman, Emil, "Priorität-Continuität" [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 106-108. 30 June 1947. Discusses instability of scientific names, with examples from the Lepidoptera. [P.B.]
- Janmouille, E., "Genitalia de Tineinae" [in French]. *Lambillionea*, vol. 49: pp. 87-88, 1 pl. 25 Aug. 1949. Figures ♂ genitalia of *Tineola biselliella* and of 8 Belgian spp. of *Tinea*. [P.B.]
- Kirkwood, Carl W., "A new moth of the genus *Apicia* from Arizona." *Bull. So. Calif. Acad. Sci.*, vol. 50: pp. 99-100, 1 fig. "May-Aug." [15 Oct.] 1951. Describes as new *A. graceiaria* (Madera Canyon, Santa Rita Mts., Ariz.); figures both sexes. Genitalia not mentioned, sp. not compared with others. [P.B.]
- de Laever, E., "Genitalia d'Hesperiidae" [in French]. *Lambillionea*, vol. 50: pp. 43-44, 1 pl. 25 Apr. 1950. Figures ♂ genitalia of 4 spp. of *Pyrgus* (subg. *Secloptrix*). [P.B.]
- de Lesse, H., "Forme nouvelle d'un *Coenonympha* du Forez" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 152-154, 4 figs. "Sept.-Oct. 1949" [25 Jan. 1950]. Describes as new *C. arcania lecerfi* (Forez). [P.B.]
- Martin, Edward L., "*Homoeosoma ravenella* and *bentincbella* Pierce." *Entomologist*, vol. 84: p. 142. June 1951. In the original description (*Ent.* 70: p. 103) figs. of ♂ genitalia of these 2 spp. reversed. [P.B.]
- Nakahara, Waro, "New or imperfectly known Japanese butterflies" *Butt. and Moths (Trans. Lep. Soc. Japan)*, vol. 2: pp. 2-3. 1951. Describes as new: *Artopoëtes pryri yezoensis* (Hokkaido, Japan); *Halpe varia obscura* (Shinano, Japan). Notes on *Neozephyrus taxila regina* and *Halpe varia varia*. [Y.O.]
- Obraztsov, Nicholas, "On the correct name of the family Phalonidae (Lepidoptera)." *Ent. News*, vol. 61: p. 198. Nov. 1950. Should be Agapetidae. [P.B.]
- Okada, Yoshio, "Genus *Zerynthia* Ochseneimer" [In Japanese]. *Butt. and Moths (Trans. Lep. Soc. Japan)*, vol. 2: pp. 4-5. 1951. 3 spp. discussed and their genitalia figured. [Y.O.]
- Okagaki, Hiromu, "Notes on the genetic name of so-called *Euchloë*-species from Japan (Pieridae)" [In Japanese, English summary]. *Butt. and Moths (Trans. Lep. Soc. Japan)*, vol. 1: pp. 35-37. 1950. *Scolymus* does not belong to *Falcapica*, and the correct generic name for *cardamines* and *scolymus* is *Anthocharis*. With genitalic figs. [Y.O.]
- Paclt, J., "Proposed suspension of the Règles for two nomina nuda of (Denis & Schiffermüller) (Lep. Satyridae)." *Ent. Berichten*, vol. 14: pp. 91-92. 1 June 1952.
- Rosier, J. P., "A new *Charaxes* from Java." *Idea*, vol. 9: pp. 24-26, figs. 31 Dec. 1951. Discusses occurrence of two subsp. of *Charaxes baya* (Moore) in Java. [A.D.]
- Slabý, Otto, "*Cidaria flavicinctata* Hbn. ex Slovakia (Lep. Geometridae)" [in Czech, Latin summary]. *Acta Soc. Ent. Českosloveniae*, vol. 46: pp. 170-172, 4 figs. 1 Oct. 1949. Figures ♂ genitalia, and those of *C. caesiata*. [P.B.]
- Viette, P., "Contribution à l'étude des Hepialidae (6^e note). Description des genitalia de quelques espèces paléarctiques" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 83-87, 1 pl. "Mar.-Apr." [4 Oct.] 1949. Describes and figures ♂ genitalia of *Alphus amasinus*, *A. laetus*, *Korscheltellus nebulosus*, *K. variabilis*, *K. armoricanus*, *K. aemilianus*. Key to 3 spp. of *Alphus*. [P.B.]
- Viette, P., "Les Noctuidae Noctuinae (Lep.) de la Nouvelle Calédonie et des Nouvelles Hébrides" [in French]. *Ann. Soc. Ent. France*, vol. 118: pp. 29-50, 38 figs. 1951. Describes as new: *Hyospila tamsi*; *Oxyodes ochreata novaehébridensis* (both from New Hebrides). Detailed descriptions of 10 spp. belonging to as many genera, with figures of ♂ and ♀ genitalia; key to the 12 genera occurring in this area (the other two were covered in an earlier paper). [P.B.]
- Viette, P., "Les types de Tinéides Meyrick appartenant au Muséum de Paris (Lep.)" [in French]. *Bull. Soc. Ent. France*, vol. 56: pp. 81-90. 1951. Lists holotypes or lectotypes, with type locality and original reference, of 182 of Meyrick's spp., belonging to 20 families. [P.B.]
- Warren, B. C. S., "*Erebia semo* Grum Grshimailo: a species distinct from *Erebia fasciata* Butler (Lepidoptera, Satyridae)." *Entomologist*, vol. 84: pp. 73-77. Apr. 1951. Separation based on genitalia and characters of androconia. [P.B.]
- Warren, B. C. S., "On a *Boloria* recorded from Abisko (Lep., Nymphalidae)." *Entomologist*, vol. 84: pp. 169-171. Aug. 1951. Comments on *B. lapponica*, a non-existent species; the name is usually misapplied to *B. pales aquilonaris* or *B. napaea*. [P.B.]

C. MORPHOLOGY AND CYTOLOGY

- Bryk, Felix, "Über die Plethopterygie bei den Schmetterlingen" [in German]. *Proc. VIII Int. Ent. Congr.*, pp. 541-543. 1950. Remarks on supernumerary wings in some Lepidoptera. [P.B.]
- Cazal, Pierre, "Les glandes endocrines rétro-cérébrales des insectes" [in French]. *Thèses Faculté Sci. Univ. Paris, ser. A.* no 2229: 227 pp., 186 figs. 1948. Describes morphology and cytology of this system in insects, including Lepidoptera. [P.B.]
- Diakonoff, A., "Een merkwaardig orgaan bij zekere Tortriciden" [in Dutch: A remarkable organ in some T.]. *Verslag 106e Zomervergadering Ned. Ent. Vereniging*: pp. LX-LXII. 15 May 1952.
- Kiriakoff, S. G., "Recherches sur les Organes tympaniques des Lépidoptères en rapport avec la classification" [in French]. *Ent. Berichten*, vol. 13: pp. 381-382. 1 Dec. 1951. Describes the tympanal organ of Cocytiidae (*Cocytia durvillii*). [A.D.]
- Miya, Keiichira, "Studies on the development of gonad of the silkworm, *Bombyx mori* L. I. On the region and period of differentiation of germ cells" [in Japanese, English summary]. *Trans. Sapporo Nat. Hist. Soc.*, vol. 19: pp. 36-39, 2 figs. Aug. 1950.
- Narbel-Hofstetter, Marguerite, "La cytologie de la parthogénèse chez *Solenobia* sp. (*lichenella* L.) (Lépidoptères, Psychides)" [in French]. *Chromosoma*, vol. 4: pp. 56-90, 51 figs. 1950. Description of maturation divisions in a tetraploid psychid with a variable chromosome number (118-126). [P.B.]
- Okada, Yoshio, "Asymmetric genitalia of *Troides aeacus* Felder (Papilionidae)." *Butt. and Moths (Trans. Lep. Soc. Japan)*, vol. 1: p. 29. 1949. Describes and figures asymmetric male genitalia of *T. aeacus* from Formosa and discusses its systematic meaning. [Y.O.]
- Shteinberg, D.M., "Formoo'razovatel'nye vozmozhnosti gipodermy pri razvitií kryl'au voshchinnoi moli (*Galleria mellonella* L.)" [in Russian; Morphogenetic possibilities of the hypodermis in the development of the wing of *Galleria*]. *Izvest. Akad. Nauk SSSR, Ser. Biol.*, 1949: pp. 340-374.
- Slabý, Otto, "The copulatory organs of a gynandromorphous *Argynnis paphia* L. and discussion about its development" [in Czech, English summary]. *Acta Soc. Ent. Českosloveniae*, vol. 47: pp. 81-95, 19 figs. 1 Oct. 1950. Describes and figures genitalia and speculates on embryological origin. [P.B.]

D. VARIATION AND GENETICS

- Christl, Otto, "Stachelbildung an Puppen von *Pieris brassicae* L." [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 95-96. 30 June 1947. Records presence of paired spines on 2nd abdominal tergite in one reared family. [P.B.]
- Hata, Yoshihiko, "On a gynandromorph of *Papilio bianor debaani*." *Butt. and Moths (Trans. Lep. Soc. Japan)*, vol. 1: p. 30. 1949. Describes and figures a bilateral gynander from Japan. [Y.O.]
- Komárek, Oldřich, "*Chrysophanus dorilis* Hufn, ab. *vilmae* n. ab. (Lep. Lyc.)" [in Czech, French summary]. *Acta Soc. Ent. Českosloveniae*, vol. 46: pp. 149-150. 1 Oct. 1949.
- Loritz, Jean, "*Minucia lunaris* Schiff., aberratio *inoperta*, forma nova" [in French & German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 93-95, 2 figs. 30 June 1947.
- Marten, Werner, "Neues über *Ocnogyna latreillei* Godt. (Lep., Arctiidae)" [in German]. *Zeits. Lepidopt.*, vol. 1: pp. 53-55, 1 fig. 1 May 1950. Notes on attraction of other spp. by ♀. Describes and names a probable genetic form. [P.B.]
- Obraztsov, N., "Au sujet de la variabilité de *Peronea bipophaeana* Heyd." [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 88-93. "Mar.-Apr." [4 Oct.] 1949. Redescribes 11 aberrations, with synonymy. [P.B.]
- Okada, Yoshio, "On a gynandromorph of *Papilio thaiwanus* Rothschild." *Butt. and Moths (Trans. Lep. Soc. Japan)*, vol. 1: p. 30. 1949. Describes and figures a partial gynander from Formosa. [Y.O.]
- Querner, Hans, "Untersuchung über die Flugelform der Mehlmotte *Ephestia kühniella* Z., insbesondere den Faktor *kfl* (kurzflugelig)" [in German, summaries in English, French, and Russian]. *Biol. Zbl.*, vol. 67: pp. 293-319, 14 figs. 1948. Analysis of growth factors affecting wing size and proportions. [P.B.]

- Réal, P., "*Argynnis euphrosine* L. ab. *dovensis* nova" [in French]. *Rev. Franç. Lépid.*, vol. 12: p. 214. "Jan.-Feb." [12 July] 1950.
- Reichl, E., "Zur Genetik einiger Formen von *Syntomis phegea* L. (Lep., Syntomidae)" [in German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 83-88. 1 Aug. 1951. Determines one "form" as sex-controlled mutant and two as non-genetic [P.B.]
- Sevastopulo, D. G., "Brownish-yellow forms of *Papilio demoleus*." *Journ. Bombay Nat. Hist. Soc.*, vol. 49: pp. 569-570. Dec. 1950.
- Sevastopulo, D. G., "Seasonal forms of *Catopsilia* spp." *Journ. Bombay Nat. Hist. Soc.*, vol. 49: p. 570. Dec. 1950.
- Sieder, Leo, "Nachtrag zu: *Psychidea bombycella* var. *noricella* (var. nova)" [in German]. *Z. Wiener Ent. Ges.*, vol. 57: p. 62. 30 June 1947.
- Zeman, J., "*Pieris napi* L. hermaphrod." [in Czech]. *Acta Soc. Ent. Českosloveniae*, vol. 46: pp. 184-185, 1 fig. 1 Oct. 1949. Describes and figures "hermaphrodite". [P.B.]

E. DISTRIBUTION AND PHENOLOGY

- Adamczewski, Stanisław, "Notes on the mining Lepidoptera of central Poland" [in Polish, English summary]. *Fragm. Faun. Mus. Zool. Polonici*, vol. 6: pp. 11-33. 19 Oct. 1949. Annotated list of 163 spp.
- Albers, Theodor, "Über Veränderungen in der Zusammensetzung der Grossschmetterlingsfauna des Gebietes von Gross-Hamburg" [in German]. *Mitt. Faun. Arbeitsgem. Schleswig-Holst.*, n.s., vol. 4: pp. 29-36. 1951. Discusses recent changes in the local fauna and the causes of disappearance of some spp. [P.B.]
- Bellet, H., "Nouvelle localité de *Araschnia levana* L. dans la Vienne" [in French]. *Lambillionea*, vol. 49: pp. 118-119. 25 Dec. 1949.
- Bentinck, G. A., "Nieuwe en zeldzame Lepidoptera in 1950". [In Dutch: New and rare L. in 1950]. *Verslag 83e Wintervergadering Nederl. Entom. Vereeniging*: pp. XXII-XXIV. 1 Feb. 1952. Gives a list of interesting captures; reports nine species as new for the Netherlands fauna. [A.D.]
- Burman, Karl, "*Notbris obscuripennis* Frey in Nordtirol (Lep., Gelechiidae)" [in German]. *Zeits. Lepidopt.*, vol. 1: pp. 31-34. 1 May 1950.
- Cardoso, Aldo, "Lepidópteros de Alagoas" [in Portuguese]. *Revista Ent.*, vol. 20: pp. 427-436. [31 Aug.] 1949. Annotated list; butterflies and macroheterocera (except Noctuidae and Geometridae). [P.B.]
- Chin-jen, Luh, "A list of recorded species of Cochlidionidae (Lepidoptera) of China." *Peking Nat. Hist. Bull.*, vol. 16: pp. 91-190. "Dec. 1941" [Apr. 1948]. Records of 97 spp. [P.B.]
- Garth, John S., "Butterflies of Grand Canyon National Park." *Grand Canyon Nat. Hist. Ass. Bull.* no. 11: 52 pp., 25 figs., 1 map. Sept. 1950. See review in *Lep. News*, vol. 5: p. 61.
- Gobert, J.-E., "*Isturgia carbonaria* 61. en Dauphiné" [in French]. *Rev. Franç. Lépid.*, vol. 12: p. 96. "Mar.-Apr." [4 Oct.] 1949.
- Gozmány, Lancelot A., "A survey of the helophilous macro-moths of the Hungarian highlands." *Lep. News*, vol. 2: pp. 93-94. Nov. 1948.
- Gozmány, L. A., "Hungarian lepidopterology. II. The Lepidoptera fauna of the Carpathian Basin." *Lep. News*, vol. 3: pp. 75-76. "Oct." [Nov.] 1949.
- Kobayashi, Keisuke, "On *Anua tirhaca separans* (Noct.) newly-recorded for Japan" [in Japanese]. *Butt. and Moths (Trans. Lep. Soc. Japan)*, vol. 1: pp. 27-28. 1949.
- Levý, Josef, "Contributio ad cognostionem lepidopterorum Bohemiae meridionalis" [in Czech, Latin summary]. *Acta Soc. Ent. Českosloveniae*, vol. 45: pp. 78-89, 156-161. 1 May, 1 Oct. 1948. Annotated list; 24 spp. are new for area. [P.B.]

F. BIOLOGY AND IMMATURE STAGES

- Alfaro, Agustín, "Orugas de *Archips* en el arbolado frutal de la Ribera del Jalón" [in Spanish]. *Bol. Patol. Veg. Ent. Agric.*, vol. 17: pp. 37-59, 22 figs. 1950. Morphology, biology, control of *A. crataegana*, *A. xylosteana*, *A. rosana*; all stages figured. [P.B.]
- Allan, P. B. M., *Larval foodplants; a vade mecum for the field lepidopterist*. 126 pp. London: Watkins and Doncaster. 1949. Lists recorded food plants of all native British macrolepidoptera and of some immigrant spp. [P.B.]

- Andersen, F. Sogaard, "Preliminary observations on the moth *Endrosis sarcitrella*" [in Danish, English summary]. *Ann. Rep. Pest Infestation Lab. Denmark*, 1948-49: pp. 21-24. 1949. Culture methods, humidity relations. [P.B.]
- Arbuthnot, K. D., "Status of European Corn Borer Parasites in the United States." *Journ. Econ. Ent.*, vol. 43: pp. 422-426, 3 figs. Aug. 1950.
- Beckham, Clifford Myron, "Biology of the Spotted Tentiform Leaf Miner, *Lithocolletis crataegella*, on Apple." *Ohio State U. Abs. Theses Master's Degree*, no. 55: pp. 19-20. 1948.
- Brooks, Maurice, "Starlings, *Sturnus vulgaris*, Eating Monarch Butterflies." *Auk*, vol. 69: p. 89. Jan. 1952. Records three instances of Starlings catching and eating *Danaus* in West Virginia. [C.R.]
- Carter, W. A. C., "Parasites of *Limenitis camilla* and *Euphydryas aurinia*." *Entomologist*, vol. 84: p. 207. Sept. 1951. Records *Apanteles gonopterygii* from both. [P.B.]
- Munroe, Eugene G., "Subventral tubercles of saturnioid Larvae - a supplementary note." *Ent. News*, vol. 61: pp. 39-40. Apr. 1950. Previous article see *Lep. News*, vol. 3, abs. no. 180. [P.B.]
- Sarlet, L., "Oeufs de Pieridae" [in French]. *Lambillionea*, vol. 49: p. 108, 2 pls. 25 Oct. 1949. Figures eggs of 11 Belgian spp. [P.B.]
- Sarlet, L., "Oeufs de Lycaenidae" [in French]. *Lambillionea*, vol. 50: pp. 19-20, 1 pl. 25 Feb. 1950. Figures eggs of 5 spp. of *Lycaena* and 4 of *Maculinea*. [P.B.]
- Sarlet, L., "Oeufs de Satyridae et de Nymphalidae" [in French]. *Lambillionea*, vol. 50: p. 60, 1 pl. 25 June 1950. Figures eggs of 4 Satyridae, 4 *Melitaea*, and *Argynnis imo*. [P.B.]
- Stellwaag, F., "Der Heu- und Sauerwurm (*Clysia ambiguella* Hüb. und *Polychrosis botrana* Schiff.)" [in German]. *Flgbl. Biol. Zentralans. Braunschweig*, no. L10: 8 pp., 8 figs. July 1949. Biology and control. [P.B.]
- Strawinski, Konstanty, "The insects observed in the medicinal herbs in the Lublin province" [in Polish, English summary]. *Ann. Univ. Mariae Curie-Skłodowska*, sect. E, vol. 3: pp. 289-345. 1948. Records 17 Lepidoptera. [P.B.]
- Thompson, W. R., *A catalogue of the parasites and predators of insect pests. Section 1. Parasite host catalogue. Parts 6-9. Parasites of the Lepidoptera.* v + 627 pp. Part 10. *Index of parasites of the Lepidoptera.* 107 pp. Ottawa: Commonwealth Bureau of Biological Control. 1944-1950. Lists Lepidoptera alphabetically by genus and species and records for each the known parasites, the area where found, and references. [P.B.]
- Troníček, Edward, "Contribution pour l'oecologie du *Carcharodus alceae* Esp. (Lep. Hesper.)" [in Czech, French summary]. *Acta Soc. Ent. Českosloveniae*, vol. 45: pp. 98-100. 1 May 1948. Larval habits. [P.B.]
- Wood, G. W., "An annotated list of lepidopterous larvae from commercial blueberry fields, Charlotte County, N.B." *Canad. Ent.*, vol. 83: pp. 241-244. Sept. 1951. Lists 19 Noctuidae, 12 Geometridae, 1 pierid, 4 Tortricidae, 1 tineid, 1 gelechiid; lists parasites reared. [P.B.]

G. PHYSIOLOGY AND BEHAVIOR

- Beck, Stanley D., "Nutrition of the European Corn Borer, *Pyrausta nubilalis* (Hbn.). II. some effects of diet on larval growth characteristics." *Physiol. Zool.*, vol. 23: pp. 353-361, 3 figs. Oct. 1950. Denies the fundamental validity of Dyar's rule. [P.B.]
- Koller, Gottfried, "Rhythmische Bewegung und hormonale Steuerung bei den Malpighischen Gefäßen der Insekten" [in German, summaries in English, French, and Russian]. *Biol. Zbl.*, vol. 67: pp. 201-211, 3 figs. 1948. Rhythmic movements of Malpighian tubules found in many insects, but not in the 6 Lepidoptera studied. [P.B.]
- Komárek, Oldřich, "Contribution aux connaissances écologiques de *Limenitis populi* L." [in Czech, French summary]. *Acta Soc. Ent. Českosloveniae*, vol. 47: pp. 168-177, 2 figs. 1 Oct. 1950. Discusses effect of microclimate on habits: *L. populi* flies high after rain, but approaches or rests on the ground after prolonged dry spells. [P.B.]
- Punt, A., "The respiration of insects." *Physiol. Comp. Oecol.*, vol. 2: pp. 59-63, 19 figs. 1950. Continuous photographic recording method shows that CO₂ production may be constant or periodic (in bursts) in various insects. Species tested were mostly Lepidoptera. [P.B.]

- Schwartz, Viktor, "Wirkungen der Luftfeuchtigkeit auf die Entwicklung und Vitalität bei *Ephestia kübniella* Z." [in German, summaries in English, French, and Russian]. *Biol. Zbl.*, vol. 67: pp. 562-574, 4 figs. 1948. Dryness affects adversely the vitality of the moths, particularly of the mutant *he*. [P.B.]
- Troniček, Edward, "Sur le mouvement des papillons éclos, spécialement de l'espèce *Brachionycha nubeculosa* Esp." [in Czech, French abstract]. *Acta Soc. Ent. Českosloveniae*, vol. 47: pp. 186-192. 1 Oct. 1950. Describes and discusses characteristic movements of newly emerged adults, which appear to seek the sunlight (probably an instinct permitting more rapid hardening of the wings). [P.B.]

H. MIGRATION

- Hanson, B., "Om bakklanges flykt hos *Gonepteryx rhamni* L. (Lep.)" [in Swedish]. *Ent. Tidskr.*, vol. 71: pp. 223-224, 1 fig. 31 Dec. 1950. Migration.
- Muspratt, V., "A propos de *Colias hyale*" [in French]. *Rev. Franç. Lépid.*, vol. 11: pp. 363-364. Sept. 1948. Migration; spring generation. [P.B.]
- Muspratt, V., "*Colias alacariensis* Ribbe n'est pas toujours sédentaire" [in French]. *Rev. Franç. Lépid.*, vol. 12: p. 94. "Mar.-Apr." [4 Oct.] 1949. Said to migrate to England with *C. hyale*. [P.B.]
- Muspratt, V., "Contribution à l'étude de *Celerio lineata livornica* Esp." [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 117-125, 180-190, 194-202. "May-June" [7 Dec.] 1949; "Nov.-Dec. 1949" [26 Apr. 1950]; "Jan.-Feb." [12 July] 1950. Migration in Europe. [P.B.]
- Tanner, Vasco M., "White-lined Sphinx Moth abundant in central Utah spring 1949." *Great Basin Nat.*, vol. 9: p. 76. 30 Dec. 1949. *Celerio lineata*; larvae feeding on *Norta* and *Polygonum*. [P.B.]
- Tillman, Ernst, "Über die Einwanderung von *Celerio lineata livornica* Esp. in Mitteleuropa in Jahre 1946 (Lep. Sphingidae)" [in German]. *Zeits. Lepidopt.*, vol. 1: pp. 23-29. 1 May 1950. Discusses a massive invasion of this sp., with a few notes on other immigrants. [P.B.]
- Warnecke, Georg, "Wanderfalter" [in German]. *Kosmos*, vol. 46: pp. 163-168, 1 pl., 4 figs. 24 Apr. 1950. General account of migration in Lepidoptera; 9 migratory spp. are illustrated in color. [P.B.]
- Warnecke, Georg, "Wanderfalter 1946 und 1947 in Deutschland" [in German]. *Zeits. Lepidopt.*, vol. 1: pp. 7-10. 1 May 1950. Report on progress in recording migrants in Europe; lists migrating spp., and information needed about them. [P.B.]
- Williams, C. B., "The migration of butterflies in North America." *Lep. News*, vol. 3: pp. 17-18. "Feb." [Apr.] 1949.
- Williams, C. B., "Migrant butterflies outside North America." *Lep. News*, vol. 3: pp. 39-40. "Apr.-May" [July] 1949.

I. TECHNIQUE

- Maessen, Th., "How I kept my butterfly collection in tropical West-Africa". *Ent. Berichten*, vol. 13: pp. 379-380. 1 Dec. 1951.
- Nabokov, Vladimir, "Remarks on F. Martin Brown's 'Measurements and Lepidoptera'." *Lep. News*, vol. 4: pp. 75-76. "1950" [Mar. 1951].

J. MISCELLANY

- Gozmány, L. A., & G. Lengyel, "Hungarian Lepidopterology - I. A short history." *Lep. News*, vol. 3: p. 43. "Apr.-May" [July] 1949.
- Heikertinger, Franz, "Sind die Schmetterlingsbilder in naturkundlichen Werken richtig? Ein Wort über fehlerhafte Tierbilder und ihre Ausmerzung durch die Naturphotographie" [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 3-32, 8 pls., 23 figs. 30 June 1947. Calls attention to inaccuracies in many figures of Lepidoptera in 'natural' attitudes; discusses and classifies the normal attitudes of butterflies and sphingids in flight and at rest, illustrating these with excellent figures. [P.B.]
- Porter, John E., & John H. Hughes, "Insect eggs transported on the outer surface of airplanes." *Journ. Econ. Ent.*, vol. 43: pp. 555-557. Aug. 1950. Numerous records, all Phalaenidae; *Laphygma frugiperda* and *Prodenia* spp. were identified. [P.B.]

NOTICES

Lepidopterists' Society members may use this page free of charge to advertise their offerings and needs in Lepidoptera. The Editors reserve the right to rewrite notices for clarity or reject unsuitable notices. Unless withdrawn sooner by the member, each notice will appear in three numbers. We can not guarantee any notices but expect all to be *bona fide*. Please notify us of any abuse of this service.

Wish to exchange with collectors in all parts of the world, the following Lepidoptera: Phalaenidae, Arctiidae, Geometridae, Notodontidae, Sphingidae, Lasiocampidae, Rhopalocera, esp. Hesperidae. Masami Ogata, Ogata Hospital, No. 18, 3chome, Imabashi, Higashi-Ku, Osaka, JAPAN.

Entire collections of Lepidoptera or season's catch purchased, as well as North American Noctuidae not in my collection. Charles Hill, 1350 San Luis Rey Drive, Glendale 8, Calif., U. S. A.

MORPHO FOR EXCHANGE; Several *M. cisseis* (rare); *M. hecuba*, *M. rhetenor*, *M. sulkowskii*; also *Chrysidia madagascariensis* (= *Urania ripheus*), *Aitacus gorgionis* in pairs. Will exchange for what have you. Also Seitz' *Macrolepidoptera*, vols. 1, 2, 3, 4 (German edition). A. Jelinek, 3900 Diversey Blvd., Chicago, 47, Ill., U. S. A.

Anticorrosive steel insect pins in all standard sizes and lengths: black \$1.20/1,000; white \$1.75/1,000. *Minuten nadeln*: black \$0.60/1,000; white \$0.95/1,000. Price list available on request. Dr. H. Wilcke, Kössen/Tyrol, AUSTRIA.

MORPHO MENELAUS, M. HECUBA, and many other Brazilian butterflies for sale, 1952 catch, papered carefully with full data, mostly named. Jorge Kesselring, Caixa postal 6, João Pessoa (Paraíba), BRAZIL.

Set of Seitz' Vol. 11 (INDO-AUSTRALIAN NOCTUIDAE), English language edition, all published parts, for sale for \$20., about $\frac{2}{3}$ the recent purchase price. J. G. Franclemont, Comstock Hall, Cornell University, Ithaca, N. Y., U. S. A.

LIVING MATERIAL

Pupae of *SPHINX LIGUSTRI* from England for sale or exchange. R. Guppy, R. R. 1, Marine Drive, Wellington, B. C., CANADA.

Wish to purchase living cocoons of *Cecropia* and *Polyphemus* moths and spread tropical Rhopalocera. L. Dalkoff, Box 32, Rock Island, Ill., U. S. A.

REARING MATERIAL WANTED (eggs, pupae) of rarer Sphingidae, Saturniidae (esp. *Hemileuca*), Arctiidae, *Catocala*. Buy or exchange. Also have large stock *Urania ripheus*, many *Morpho*. Desire correspondence with collectors in Japan and South America. Eugene Dluhy, 3912 N. Hamilton Ave., Chicago 18, Ill., U. S. A.

For workers with special interest in the American fauna, a very large collection of Brazilian and Bolivian Lepidoptera, 30,000 specimens ($\frac{2}{3}$ moths), all spread and labeled, is offered for sale. These are mostly from the Seitz-Marten Expedition. Specialties are the Hesperidae (4,000 of more than 750 species) including the Fassl material on which the section in Seitz' work was based; Riodinidae (3,000); Aegeriidae with 8 types; very many Arctiidae. The collection, in three large cabinets of glass-topped cases 40 x 50 cm., is at Frankfurt am Main, Germany. Accessible for inspection. For further information, write Dr. WERNER MARTEN, Guillermo Tell, 44, Barcelona, SPAIN.

NOMINATIONS FOR 1953 OFFICERS

Nominations for offices to be filled at the end of 1952, but not announced in the last issue of *The Lepidopterists' News*, are as follows:

Secretary—FREDERICK H. RINDGE

Treasurer—SIDNEY A. HESSEL.

SEASON SUMMARY FOR 1952

The summary of field conditions for Lepidoptera during the 1952 season (in North America) will be published during the spring of 1953, instead of being the concluding issue of the current volume of *The Lepidopterists' News*. The deadline for submission of individual reports to Area summarizers will be shortly after New Years, but it is urged that these reports be sent to the Area summarizers as soon after the end of the local collecting season as possible. Detailed instructions for the 1952 Summary will appear in the next issue of the *News*. The Area summarizers will probably be the same as for the 1951 Summary.

PROPOSALS CONCERNING CODE OF ZOOLOGICAL NOMENCLATURE

Notice has been received from Capt. FRANCIS HEMMING, Secretary to the International Commission on Zoological Nomenclature, that a number of problems of great importance to zoological taxonomists involving the text of the International Code of Zoological Nomenclature will be brought forward for decision at the approaching International Congress of Zoology to be held in Copenhagen, Denmark, in 1953. These are the following:

1. Emendation of zoological names.
2. Names of families and lower suprageneric categories.
3. Regulating names of orders and higher categories.
4. Type species of genera published in synonymy.
5. Trivial names first published as substitutes for previous names.
6. Neotypes: whether to be officially recognized and how regulated.
7. Means for securing stability in nomenclature.

Volume 7 of the *Bulletin of Zoological Nomenclature* is being devoted to these matters. Systematists especially interested in any of these questions should send their views immediately to the Secretary (28 Park Village East, Regent's Park, London, N. W. 1, England).

The usual list of ADDITIONS TO THE LIST OF MEMBERS will be omitted from this issue because the 1952 List will be published soon.
