

RECENT LITERATURE ON LEPIDOPTERA

(Under the supervision of PETER F. BELLINGER)

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; omissions of papers more than 3 or 4 years old should be called to Dr. BELLINGER'S attention. New genera and higher categories are shown in CAPITALS, with types in parentheses; new species and subspecies are noted, with type localities if given in print. Larval foodplants are usually listed. Critical comments by abstractors may be made. Papers of only local interest and papers from *The Lepidopterists' News* are listed without abstract. Readers, particularly outside of North America, interested in assisting with this very large task, are invited to write Dr. BELLINGER (University College of the West Indies, Mona, St. Andrew, Jamaica, B.W.I.). Abstractors' initials are as follows: [P.B.] — P. F. BELLINGER; [A.D.] — A. DIAKONOFF; [W.H.] — W. HACKMAN; [E.M.] — E. G. MUNROE; [N.O.] — N. S. OBRAZTSOV; [C.R.] — C. L. REMINGTON; [J.T.] — J. W. TILDEN; [P.V.] — P. E. L. VIETTE.

A. GENERAL

- Bergmann, A., *Die Grossschmetterlinge Mitteld Deutschlands*. Vol.4: *Eulen*. Part I: 580 pp., 47 pls., 171 figs. Part 2: 480 pp., 37 pls., 132 figs. Jena: Urania-Verlag. 1954. [Not seen].
- Brandt, Herbert, *Schmetterlinge*. Erster Teil (Winters Naturwissenschaftliche Taschenbücher, vol.20). 176 pp., 64 pls., 55 figs. Heidelberg: Carl Winter, Universitätsverlag. 1953. [Not seen].
- Brues, Charles T., A. L. Melander, & Frank M. Carpenter, *Classification of insects. Keys to the living and extinct families of insects, and to the living families of other terrestrial arthropods*. *Bull. Mus. Comp. Zool. Harvard*, vol.108: v + 917 pp., 1219 figs. 1954. A revised edition of this unique work. Includes keys to adults and larvae of Lepidoptera, revised by C. L. REMINGTON. [P.B.]
- Forster, Walter, & Theodore A. Wohlfahrt, *Die Schmetterlinge Mitteleuropas*, vol.1. xii + 202 pp., 147 figs. Stuttgart: Franckh'sche Verlagshandlung, 1952-54. See reviews in *Lepid. News*, vol.6: pp. 79-80; vol.7: p.26; vol.8: pp.170-171.
- Koch, Manfred, *Wir bestimmen Schmetterlinge*. Vol.1: *Tagfalter Deutschlands (unter Ausschluss der Alpengebiete)*. 119 pp., 16 pls., 63 figs. Radebeul & Belrin: Neumann Verlag. 1954. [Not seen].
- Koch, Manfred, & Kurt Herschel, *Falter bei Tag und bei Nacht*. 288 pp. (incl. 132 col. pls.) Radebeul & Berlin: Neumann Verlag. 1953. [Not seen].
- Tietz, Harrison M., *The Lepidoptera of Pennsylvania. A manual*. xii + 194 pp., 2 figs. State College, Pa. 1952. See review in *Lepid News*, vol.8: pp.172-173.

B. SYSTEMATICS AND NOMENCLATURE

- Alberti, B., "Die systematische Stellung der Genera *Caffricola* Hmps. und *Arctozygæna* Gaede (Lep. Zygaenidae)" [in German]. *Rev. Zool. Bot. Afric.*, vol.50: pp.40-44, 2 figs. Nov. 1954. Note on the systematic position of the genera *Caffricola* and *Arctozygæna* and description of *C. vicina* from Transvaal. [P.V.]
- Amsel, H. G., "Zur Nomenklatur von *Lita amaurella* Rbl. (Lepidoptera: Gelechiidae)" [in German]. *Zeits. Wiener Ent. Ges.*, vol.38: pp.274-275. 15 Oct. 1953. Proposes new name: *Gnorimoschema hispanicella* (= *Lita amaurella* Rbl., 1927, nec Hering, 1924). [N.O.]
- Bauer, David L., "An apparent hybrid *Limenitis* from Arizona." *Lepid. News*, vol.8: pp.129-130. 20 Oct. 1954.
- Beirne, Bryan P., *British pyralid and plume moths*. 208 pp., 16 pls., 189 figs. London: Frederick Warne & Co., Ltd., 15 Sept. 1952. (See review in *Lepid. News*, vol.8, p.49).
- Berger, L. R., "*Liptena (Tetrarhanis) nouveaux du Congo Belge* (Lepidoptera Lycæniidae)" [in French]. *Ann. Mus. Roy. Congo Belge, Sci. Zool., ser. in 4^e, n. s.* vol.1: pp.306-309, 13 figs. 1954. Descriptions of two new species of *Liptena* from the Belgian Congo: *L. (T.) stempfferi* and *L. (T.) schoutedeni*. [P.V.]

- Bigelow, R. S., & C. Reimer, "An application of the linear discriminant function to insect taxonomy." *Canad. Ent.*, vol.86: pp.69-73. 10 March 1954. Definition of comparative characters in quantitative terms. [E.M.]
- Bourgogne, J., "Un *Oreopsyche* nouveau du Portugal et de l'Espagne (Psychidæ)" [in French]. *Rev. franç. Lépid.*, vol.14: pp.133-137, 2 pls., 7 figs. 1954. Describes as new *O. matthesi*, a psychid from Portugal and Spain. [P.V.]
- Boursin, Charles, "Über die Gattung *Allophyes* Tams nebst Beschreibung einer neuen Art aus Klein-Asien (Lep. Phalaenidæ (Noctuidæ)). (Beiträge zur Kenntnis der 'Agrotidæ-Trifinæ', 59)" [in German]. *Mitt. Münchn. Ent. Ges.*, vol.43: pp.239-247, 3 figs. 1 July 1953. Discusses systematic position and characters of the genus, and the classification of the species. Describes as new *A. metaxys* (Marash, N. Syria); proposes *Blephariata draudti* new name for *Meganephria adusta* Drdt. (*nec* Esp.). Figures moths and ♂ genitalia. [N.O.]
- Boursin, Charles, "Zwei neue paläarktische *Cryphia* (*Bryophila*)-Arten (Beiträge zur Kenntnis der "Agrotidæ-Trifinæ", LX)" [in German]. *Mitt. Münchn. Ent. Ges.*, vol.43: pp.248-251, 1 pl. 1 July 1953. Describes as new *C. rückbeili* (Dzharkent, Prov.Ili) and *C. raddei* (Dshafar-Aga, Turkish Armenia); figures types and ♂ genitalia. Figures without any description *C. ravuloides*, "new species" (Kashmir). [N.O.]
- Boursin, Charles, "Eine neue Gattung der Unterfamilie Agrotinæ aus dem vorderasiatisch-mediterranean Faunenkreis. (Beiträge zur Kenntnis der 'Agrotidæ-Trifinæ' 62)" [in German]. *Zeits. Wiener Ent. Ges.*, vol.38: pp.212-217, 4 pls. 15 Aug. 1953. Describes as new *PACHYAGROTIS* (type *Cladocerotis ankarensis* Rbl.). Discusses relationship, figures genitalia and other structures of the new and related genera. [N.O.]
- Boursin, Charles, "Über die systematische Stellung von "*Leucocblæna*" *orana* Lucas. Nebst Beschreibung einer neuen Gattung und einer neuen Art aus Französisch Marokko. (Beiträge zur Kenntnis der Agrotidæ-Trifinæ, 63)" [in German; French summary]. *Zeits. Wiener Ent. Ges.*, vol.38: pp.239-244, 1 pl. 15 Sept. 1953. Describes as new *EREMOCHLÆNA* (type *orana* Lucas), with *E. oranoides* (Rabat, Fr. Morocco). [N.O.]
- Brown, F. Martin, "Taxonomic notes on *Ceneis ubleri* Reakirt (Lepidoptera, Satyridæ)." *Amer. Mus. Novit.*, no.1625: 26 pp., 8 figs. 6 May 1953. Describes as new *O. u. reinthali* (Gothic, Colo.). Statistical analysis of size, color, and pattern variation in some populations of ssp. *reinthali*, *ubleri*, and *varuna* [P.B.]
- Brown, F. Martin, "The subspecies of *Ceneis alberta* (Lepidoptera, Satyridæ)." *Amer. Mus. Novit.*, no.1626: 21 pp., 10 figs. 6 May 1953. Statistical analysis of populations of ssp. *alberta*, *oslari*, and *daura*; the first two are doubtfully distinct. [P.B.]
- Chiarelli de Gahan, Angelina, & Enrique Augustín Touron, "Biología y taxonomía de *Heliothis armigera* (Hbn.)" [in Spanish]. *Rev. Invest. Agric.*, vol.8: pp. 111-148, 21 figs. Aug. 1954. Synonymizes *Thyreion gelotopoeon* under *H. armigera*. Gives an extremely thorough description of all stages and biology. A model paper, but the separation of the North American species from the Old World *H. armigera* has been overlooked. [P.B.]
- Clench, Harry K., "The identity of *Crambidia allegheniensis* (Lithosiidæ)." *Lepid. News*, vol.8: pp.93-94. 17 Sept. 1954.
- Collenette, C. L., "New and little known African Lymantriidæ (Lepidoptera: Heterocera)." *Trans. Roy. Ent. Soc. London*, vol.105: pp.146-155, 1pl. 16 Aug. 1954. Describes as new *Cropera aphantia* (Elizabethville, Belgian Congo); *Marbla haplora* (Kigezi, 7500-8000', Uganda); *Euproctis episema* (Elizabethville); *Paraproctis chionopeza* Mpika, N. Rhodesia); *Memerophanes diatoma triphyes* (Elizabethville); *Dasychira thika* (Thika Road, Kenya); *Euproctidion periblepta* (Elizabethville); also several "forms". Figures adults. Revisional notes and new synonymy in *Hemerophanes* and *Dasychira*, and notes on some other spp. [P.B.]
- Collenette, C. L., "Two new Lymantriidæ from the Belgian Congo." *Rev. Zool. Bot. Afric.*, vol.50: pp.7-9, 2 figs. Nov. 1954. Describes as new *Dasychira phædropoda* and *D. eudela*, both from Elizabethville. [P.V.]
- Cox, Constance E., "Analysis of frequency distribution of adults and larvæ of *Choristoneura fumiferana* (Clem.) and *C. pinus* Free. (Lepidoptera: Tortricidæ)." *Canad. Ent.*, vol.85: pp.136-141, 4 figs. 15 April 1953. Significant differences in postclypeal indices and uncus widths are shown for the two species. In addition, a bimodality of unexplained origin is shown in 2 larval and one adult character of *C. pinus*. Frequency distributions of these characters in *C. fumiferana* were unimodal. [E.M.]

- Daniel, Franz, "Neue Heterocera-Arten und -Formen" [in German]. *Mitt. Münchn. Ent. Ges.*, vol.43: pp.252-261, 1 pl. 1 July 1953. Describes as new *Spilarctia tschitaensis* (Tshita, Transbaikalia), *S. hanoica* (Hanoi, Tonking); *Callimorpha quadripunctaria rhodosensis*; *SELENEPHERIDES*, and type *S. monotona* (Tapaishan in Tsinling, S. Shensi), *S. m. likiangica* (Li-kiang, N. Yunnan); *Lemonia syriensis* (Marash, N. Syria); *Cossus cossus afghanistana* (Wardik, Afghanistan), *C. aksuensis* (Ak-su Valley, Thian-shan); *DYSPESSACOSSUS*, and type *D. hadjinensis* (Hadjin, Asia Minor); *Catopta ibripi polonica* (Babine, Podolia); *Dyspessa salicicola aschabadensis* (Aschabad, C. Asia). [N.O.]
- Daniel, Franz, "Untersuchung der Typen von *Endrosa pseudokublweini* Vorbr. (Lep.-Het)" [in German]. *Nachrbl. Bayer. Ent.*, vol.3: pp.52-54, 1 fig. 15 May 1954. Discusses distinguishing features of this and other European *Endrosa* species. [N.O.]
- Drianovski, A., "*Crypsedra niphopasta* Obrth. (Insecta, Lepidopt.) subsp. *bulgarica* aus Bulgarien" [in Bulgarian, German summary]. *Izv. Zool. Inst. Bulg. Akad. Nauk.*, vol.3: pp.373-376. 1953. New subspecies. [Not seen].
- Dufrane, A., "Sur quelques Lycenidæ d'Afrique [in French]. *Bull. Ann. Soc. Ent. Belg.*, vol.90: pp.282-286. Oct. 1954. Notes on the determinations and the last publications of the author on African Lycenidæ. Describes as new *Iolaus silas maureli* (Harrar, Ethiopia); *Spindasis trimeni congolanus* (Luebo, Belgian Congo); *Axiocerces maureli* (Harrar, Ethiopia). Types in the author's collection. [P.V.]
- Dufrane, A., "A propos de *Syntarucus pulchra* Murray (Lép. Lyc.)" [in French]. *Bull. Ann. Soc. Ent. Belg.*, vol.90: pp.66-68. 1954. Correction of the citation of *S. pulchra* from Kivu (Belgian Congo). [P.V.]
- Ehrlich, Paul R., "Notes on *Erebia rossii* Curtis (Lepidoptera, Satyridæ)." *Ent. News*, vol.65: pp.225-227. 1954. Suggests that *E. r. gabrieli* dos Passos will prove to be a synonym of *E. r. kuskoquim* Holland. Speculates as to the possible causes of the peculiar distribution of *E. rossii*. [J.T.]
- Ferguson, Douglas C., "On the identity and status of *Eubaphe lamæ* Freeman (Lepidoptera, Arctiidæ)." *Canad. Ent.*, vol.85: pp.371-373, 9 figs. 21 Oct. 1953. Considers *E. lamæ* a sp. distinct from *E. aurantiaca*. The application of the name *bimaculata* is doubtful. [E.M.]
- Ferguson, Douglas C., "Revision of the *occiduaria-argillacearia* complex of the genus *Itame*, with descriptions of new races (Lepidoptera, Geometridæ)." *Canad. Ent.*, vol.85: pp.453-461, 18 figs. [numbered 1-4, 1-14:]. 30 Dec. 1953. Describes as new "races" *I. andersoni orientis* (Auburn, Kings Co., N. S.) and *I. sulphurea amboflava* (Calgary, Alta.). Distinguishes *I. occiduaria*, *andersoni*, *argillacearia*, and *sulphurea*. A useful and needed contribution. [E.M.]
- Ferguson, Douglas C., "A revision of the genus *Hyphenodes* Doubleday with descriptions of new species (Lepidoptera, Phalaenidæ)." *Canad. Ent.*, vol.86: pp.289-298, 3 pls. 20 Aug. 1954. Describes as new: *H. palustris* (Prospect Road, Halifax Co., N. S.), *H. sombrus* (Concord, N. H.), and *H. franclemonti* (Halifax Co., N. S.). An excellent paper. [E.M.]
- Fletcher, D. S., "A revision of the genus *Eubaphe* (Lepidoptera: Geometridæ)." *Zoologica, N. Y.*, vol.39: pp.153-166, 63 figs. 31 Dec. 1954. Describes as new *E. pumilata* (Holguin, Cuba); *E. unicolor venustata* (Calderas, Guatemala); *E. deceptata* (Orizaba, Mexico); *E. fieldi* (San Esteban, Venezuela); *E. orfilai* (Matto Grosso, Brazil). Synonymizes *E. aurata* under *Oncopus citrosa*. Redescribes 21 spp., figuring genitalia of 20. Resedescribes genus and the related genera *Eudule* and *Eudulophasia*, and lists spp. of these. The valid name for the arctiid genus usually called *Eubaphe* is stated to be *Holomelina*. [P.B.]
- Fletcher, D. S., & E. T. M. Reid, "A synonymic list of the genus *Arcyphora* Guenée (Agrotidæ, Westermaniinae). With observations on adult feeding habits." *Proc. Roy. Ent. Soc. London (B)*, vol.24: pp.197-204. 31 Dec. 1954. *Sectotena* and *Goniexstis* are synonyms of *Arcyphora*. Key to known species. Adults of at least 3 spp. feed on the lacrymal exudations of cattle. [P.B.]
- Forbes, William T. M., "Presidential address to Los Angeles meeting of the Lepidopterists' Society." *Lepid. News*, vol.8: pp.1-4. 25 June 1954.
- Freeman, T. N., "A note on the occurrence of a European tortricid, *Cnephasia virgaureana* Treit., in Newfoundland with new synonymy (Lepidoptera)." *Canad. Ent.*, vol.85: p.291. 16 Sept. 1953. Sinks *oleraceana* as a synonym. [E.M.]
- Freeman, T. N., "The spruce budworm, *Choristoneura fumiferana* (Clem.) and an allied new species on pine (Lepidoptera: Tortricidæ)." *Canad. Ent.*, vol.85: pp.121-127,

- 22 figs. 15 May 1953. Describes as new and figures *C. pinus* (Beauséjour, Man.), a widely distributed Canadian pine-feeding sp., and compares it with the sibling sp. *C. fumiferana* and with certain other Nearctic relatives. [E.M.]
- Gerhardinger, Klaus, "Diacrisia sannio L." [in German]. *Zeits. Wiener Ent. Ges.*, vol.38: pp.289-308, 1 pl. 15 Nov. 1953. Monograph. [N.O.]
- Gillham, Nicholas W., & Paul R. Ehrlich, "The naming of subspecies in Lepidoptera." *Lepid. News*, vol.8: p.100. 17 Sept. 1954.
- Herbulot, Cl., "Lépidoptères géométrides" in "La réserve naturelle integrale du Mont Nimba" [in French]. *Mem. Inst. Franç. Afr. Noire*, no.40: pp.301-333, 1 pl., 17 figs. 19 Nov. 1954. Study of a collection of Geometridæ from the Nimba Mts. (French Guinea); describes as new: *Mixocera sudanica* (Geometrinæ); *Scopula mendax*, *S. subsincera* (Sterrhinæ); *Piercia occidentalis*, *Ctenaulis acutivalvis* (Larentiinæ); *Eulycia excavata*, *Colocleora splendens*, *Miantochora fletcheri*, *M. lisa*, *M. discalis*, *Geolyces contracta*, *Mesothisa royi*, *Neocleora lamottei*, *Zamarada melanopyga*, *Z. corroborata*, *Z. cydippe*, *Thysanopyga limbata* (Ennominae). [P.V.]
- Hering, Erich M., "Die Gattung *Crothæma* Btl. (Lep. Cochlidiidæ)" [in German]. *Ann. Mus. Roy. Congo Belge, Sci. Zool.*, ser. in 4°, n. s. vol.1: pp.381-386, 7 figs. 1954. Study of the different species of the genus *Crothæma* (of Africa and Madagascar) with a key to species. Description of a new species: *C. schoutedeni* (Belgian Congo). Erects for this genus a new subfamily CROTHÆMINÆ. The family Cochlidiidæ now contains two subfamilies: Crothæminæ (genus typicum: *Crothæma* Btl.) and Cochlidiinæ (genus typicum: *Cochlidion* Hbn.). [P.V.]
- Holik, Otto, & Leo Sheljuzhko, "Über die Zygænen-Fauna Osteuropas, Kleinasiens, Irans, Zentralasiens und Sibiriens" [in German]. *Mitt. Münchn. Ent. Ges.*, vol.43: pp.102-226. 1 July 1953. Revision of *Zygæna* species on a zoogeographical basis. Discusses 6 spp. Describes as new subspecies of *Z. (Mesembrinus) purpurialis* Brunn: *Z. p. alagirica* (Uruch Valley near Ach-sau, N. Ossetia), *Z. p. alagezi* (Inaklu, Russian Armenia), *Z. p. zangezuri* (Ochtshi, near Kafan, Russian Armenia), *Z. p. talassica* (Aulie-Ata, W. Ala-tau). Names 2 aberrations of *Z. cambysea rosacea*. To be continued. [N.O.]
- Kautz, Hans, "Bemerkungen zu den Arten *Pieris napi* L., *bryoniae* O., adalwinda Fruhst. und zur mod. *hibernica* Schmidt" [in German]. *Zeits. Wiener Ent. Ges.*, vol.38: pp. 258-261. 15 Oct. 1953. Discusses characters and variation. [N.O.]
- Kiriakoff, S. G., "Les Thyretidæ du Musée Royal du Congo Belge (Lepidoptera Notodontoidea)" [in French]. *Ann. Mus. Roy. Congo Belge, ser. in 8°, Sci. Zool.*, vol.26: 91 pp., 7 pls. Dec. 1953. Study of the Thyretidæ (a part of the Syntomidæ auctt.) of the Belgian Congo. Describes as new: *Apisa* subg. *DUFRANEELLA* (type *grisescens* Dufrane); *Thyretes cooremani* (Bas-Congo); *MESONACLIA* (type *minor* Tmps.); *DIAKONOFFIA* (type *kivensis* Dufrane); *ELSA* (type *invaria* Walker), *E. forsteri* (Kivu); *E.* subg. *RHIPIDARCTIA*, and type *E. (R.) rubrosuffusa* (Tshuapa); *MECISTORHABDIA* (type *hematoëssa* Holland); *RHABDOMARCTIA* (type *rubrilineata* Bethune-Baker), *R. similis* (Tshuapa); *HIPPURARCTIA*, and type *H. vicina* (Kivu); *H. v. overlaeti* (Lualaba); *H. bergeri* (Lualaba); *Metarctia* subg. *METARHODIA* (type *rubripuncta* Hmps.); *Metarctia deriemaeckeri* (Mt. Katanga); *M. schoutedeni* (Kivu); *M.* subg. *NOTHARCTIA* (type *flavivena* Hamps.); *Metarctia debauchei* (Ruanda-Urundo); *M. hulstaertiana* (Tshuapa); *M.* subg. *CENARCTIA* (type *erlangeri*); *M.* subg. *PTEROPHÆA* (type *brunneipennis* M. Hering); *Metarctia dracoena* (Sankuru); *M. seydeliana* (Mt. Katanga); *M. olbrechtsi* (Lualaba); *M. fuliginosa* (Sankuru); *M. cinctella* (Sankuru); *Balacra basilewskyi* (Sankuru); *B. distincta* (Sankuru); *B. fontainei* (Sankuru); *B.* subg. *DAPHÆNISCA* (type *daphæna* Hmps.); *B.* subg. *ALLOBALACRA* (type *rubrostriata*); *B.* subg. *COMPSOCHROMIA* (type *compsa*); *B.* subg. *LAMPROBALACRA* (type *pulchra*); *LEMPKEELLA* (type *dufranei* Kiriak.); *Paramelisa leroyi* (Kivu); *COLLARTISA*, and type *collartorum* (Tshuapa). [P.V.]
- Kiriakoff, S. G., "Amatines (Lepidoptera Arctiidæ) nouveaux du Congo Belge" [in French]. *Ann. Mus. Roy. Congo Belge, ser. in 4°, Sci. Zool.*, n.s. vol.1: pp.431-434, 8 figs. 1954. Descriptions of 8 new species of Arctiidæ Ctenuchinæ from the Belgian Congo: *Myopsyche pallidicincta*, *M. sankuruica*, *M. bokumæ*, *Amata hypomela*, *A. obratzsovi*, *A. albobasis*, *A. marinoides*, and *A. schoutedeni*. [P.V.]
- Kiriakoff, S. G., "Contribution à l'étude des Lépidoptères Hérocères. I. Notodontides nouveaux du Congo Belge" [in French]. *Bull. Inst. Roy. Sci. Nat. Belg.*, vol.30, no.14: 10 pp., 8 figs. April 1954. Descriptions of new spp. and new genus of Notodontidæ

- from Belgian Congo in Brussels Museum: *Clostera ochracearia*; *Desmeocræra tenera* (Katanga); *OVERLAETIA*, *O. griseocens* (Lupweji); *Macronadata aurivilliusi*; *Trotonotus castaneus* (Kafakumba); *Brachybira argyrosticta* (Kafakumba). [P.V.]
- Kiriakoff, S. G., "Chorologie et systématique phylogénétique" [in French]. *Bull. Ann. Soc. Ent. Belg.*, vol.90: pp.185-198, 1 map. Aug. 1954. Thoughts of the author, after W. Hennig (1950), on the relation between chorology and phylogenetic systematics. For the author, two subspecies geographically isolated, e.g. in central Europe and East Asia, are two good species. The case of "genera" having numerous species in one area (e.g. Neotropical) and one species in another area (e.g. Africa) should be reconsidered. [P.V.]
- Kiriakoff, S. G., "Hétérocères nouveaux et peu connus du Katanga (première partie)" [in French]. *Rev. Zool. Bot. Afric.*, vol.49: pp.293-327, 2 pls. 14 Aug. 1954. Study of the Notodontidae collected in the Elizabethville area, Katanga, Belgian Congo. Describes as new: *GLUPHISIODES* and type, *G. bivittata*; *Desmeocræra dichonia*, *D. denisæ*, *D. analis*, *D. lugubris*, *D. adversa amica*, *D. divergens*, *D. collenettei*, *D. frater*, *D. rileyi*; *esmeocræra basimacula*; *ULINELLA* and type, *U. cotyto*; *Fentonia umbra*; *ARCHISTILBIA* and type, *cineracea*; *BILULUA*, *B. atricollis* (generotype), *B. strigata*; *Antheua trimacula*; *Brachybira lunuligera*. All the types are in the Belgian Congo Museum. [P.V.]
- Kiriakoff, S. G., "Hétérocères nouveaux ou peu connus du Katanga" [in French]. *Rev. Zool. Bot. Afric.*, vol.50: pp. 169-188, 2 pls. Nov. 1954. New or little known Heterocera from Katanga (Belgian Congo). Describes as new (Notodontidae) *Desmeocræra venusta*; *Rhenea rufescens*; (Arctiidae) *Aglossosia griseoargesteæ*; *DIPLONYCHODES*, and type *D. ruficeps*; *Caripodia pallidior*; *Edaleosia conspicua*; *ZADADRINA* and type, *Z. metallica*; *Eilema leiodes*, *E. beringi*, *E. tricolorana*; *Pbryganopsis isabellina*, *P. tocha*, *P. sorgbicolor*; *Estigmene costalis*; *MENEGITES* and type, *M. nivea*; *Amsacta ochreolatescens*, *A. aliena*; *TAMSITA* (type *ochthæba* Hmps.); *GASTROCHRYZIA*, *G. lineolata*. [P.V.]
- Klimesch, J., "Die europäischen *Trifurcula*- und *Ectosedmia*-Arten (Lep., Neptulidæ)" [in German]. *Zeits. Wiener Ent. Ges.*, vol.38: pp.160-170, 191-196, 22 figs. 15 June, 15 July 1953. Revises the above genera; describes as new: *T. maxima* (Male: Nürnberg; female: Dürkheim), *T. orientella* (Gravosa, Dalmatia); *E. longicaudella* (Nagy Nyir, Hungary), *E. liguricella* (Noli, Liguria). [N.O.]
- Klimesch, J., "Die an Caryophyllaceen lebenden europäischen *Gnorimoschema* Busck (= *Phtborimæa* Meyr.)-Arten. Ein Beitrag zur Kenntnis der Genitalmorphologie der Gelechiiden (Lep.) sowie Beschreibung von zwei neuen Arten" [in German]. *Zeits. Wiener Ent. Ges.*, vol.38: pp.225-239, 275-282, 311-318, 46 figs. 15 Sept., 15 Oct., 15 Nov. 1953. Systematic notes, redescriptions and genitalia. Describes as new: *G. leucothoracellum* (Dürnstein, Austria) and *G. fiorii* (Gran Sasso, Abruzzo). [N.O.]
- Lange, W. Harry, Jr., "Biology and systematics of plume moths of the genus *Platyptilia* in California." *Hilgardia*, vol.19: pp.561-668, 16 pls., 7 figs., 8 tables. 1950. The following are described as new: *Platyptilia pica calisequoia* (Hiouchi State Redwood Park, Del Norte Co., Castilleia); *P. p. sierræ* (Emigrant Gap, Placer Co., on Castilleia), *P. baueri* (Lucas Valley, Marin Co.); *P. albiciliata rubricans* (Pt. Lobos, Monterrey Co., on Castilleia); *P. lutescens* (Ivanpah Mts., San Bernardino Co.); *P. bifida* (Hauchuca Mts., Arizona). The plates show ova, larvæ, pupæ, adults, and genitalia. History, phylogeny, economic implications and other phases of the subject are covered. The work seems to be a very complete and excellent revision of the genus. [J.T.]
- Le Charles, L., "Contributions à l'étude des zygènes" [in French]. *Rev. franç. Lépid.*, vol.14: pp.143-145. 29 June 1954. Critical discussion of the paper by E. Haaf (1953) on male genitalia of Zygænidae, with a list of subgenera and species of *Zygæna* after Burgeff, 1926. [P.V.]
- de Lesse, H., "Discussion de certains caractères morphologiques d'*Arethusa arethusa* Schiff. et des formes *boabdil* Rambur et *dentata* Stgr." [in French]. *Rev. franç. Lépid.*, vol.14: pp.140-142, 11 figs. Discussion, with reference to the paper of G. Varin (1953) (cf. *Lepid. News*, vol.8, p.149) of some morphological characters of *A. arethusa* and its forms. [P.V.]
- Lorkovic, Z., & H. de Lesse, "Expériences de croisements dans le genre *Erebia* (Lépidoptères Satyridæ)" [in French]. *Bull. Soc. Zool. France*, vol.79: pp.31-39. July 1954. *E. tyndarus* and *E. hispania* are very different species in spite of the likeness of their ♂ and ♀ genitalia. The artificially produced hybrids between *tyndarus* and

- hispania* are sterile and degenerated, which is not generally the case for hybrids of close species; a great difference exists in the chromosome number of *E. hispania rondouii* (n=24) and *E. tyndarus calcarinus* (n=8), the material for the crossing experiments. [P.V.]
- Lucas, D., "Nouveaux Lépidoptères Nord-Africains" [in French]. *Bull. Soc. Sci. Nat. Phys. Maroc*, vol.34: pp.35-39. Sept. 1954. Descriptions of new species: Noctuidæ, *Acronycta elegans* (Tunisia), and Pyralidæ and Tortricidæ from Morocco (Ifrane, unless other locality specified): *Homœosoma buckwelli*, *Chilo powelli* (Casablanca), *Heterographis buckwelli* (Safi), *Etiella ifraneella*, *Brepbia marocana*, *Cledeobia confusalis*, *Myelois superbella*, *Pyrausta buckwelli*, *Tortrix obscurana*, *Euxanthibis pallens*, *Olethreutes marocana*, *Pblyctænodes buckwelli*, *Anisotænia buckwelli*, *Hypotomorphba moghrebana* (Chavent). Also three "varieties". Short descriptions without figures; no indications on the type material in a private collection; the families are mixed. Such a work should not be accepted for publication. [P.V.]
- MacKay, Margaret R., "A new species of *Sparganothis* allied to *S. pettitana* (Rob.), with description of larvæ and adults of both species (Lepidoptera: Tortricidæ)." *Canad. Ent.*, vol.84: pp.233-242, 33 figs. 29 Aug. 1952. Describes as new *S. acerivorana* (Kingsmere, Que.), a maple-feeding sibling of the mainly bass-feeding *S. pettitana*. Excellent figures, mostly comparative, are given of many structural details of various larval instars, of ♂ and ♀ genitalia, and of adults. Primary types are figured, and quantitative differences in genitalic proportions are shown graphically. A careful and detailed paper. [E.M.]
- Marion, H., "Contribution à l'étude des pyrales africaines" [in French]. *Mem. Inst. franç. Afrique Noire*, no.40: pp.335-338, 3 figs. 19 Nov. 1954. Describes as new *MUNROEIA* and type, *M. lamottei* (Galleriidæ) and *Glyphodes royalis* (Pyraustidæ) from the Nimba Mts. (French Guinea). [P.V.]
- Marion, H., "Deux Galleriidés nouveaux de Madagascar (Lepid.)" [in French]. *Rev. franç. Ent.*, vol.21: pp.216-218, 4 figs. 1954. Descriptions of two new species of Galleriidæ from South Madagascar: *Megarthria seyrigalis* and *M. bekilalis*. [P.V.]
- Mattoni, Rudolph, "(Abstract) Taxonomy and distribution in the genus *Philotes*." *Lepid. News*, vol.8: p.8. 25 June 1954.
- Michener, Charles D., "A note on a subgeneric name in the Saturniidæ." *Ent. News*, vol.62: p.124. 1953. Corrects error in previous papers, where a trivial name was misspelled and credited to the wrong author. [J.T.]
- Munroe, Eugene, "The geographic variation of *Dasyuris polata* (Duponchel) in North America (Lepidoptera: Geometridæ)." *Canad. Ent.*, vol.83: pp.290-294, 12 figs. 16 Nov. 1951. Describes as new: *D. p. bradorata* (Bradore Bay, Strait of Belle Isle, Que.); *D. p. ursata* (Cameron Bay, Great Bear Lake, N. W. T.); *D. p. kidluitata* (Kidluit Bay, Richards Is., N. W. T.); *D. p. alentiata* (Cold Bay, Alaska). Also recognized are subspecies from Greenland and from the eastern Canadian Arctic; the status of the Colorado and Ellesmere Island populations remains uncertain. Representative adults are figured. [E.M.]
- Munroe, Eugene, "The *illibalis* group of the genus *Palpita* Hübner (Lepidoptera: Pyralidæ)." *Canad. Ent.*, vol.84: pp.43-55, 32 figs. 27 Feb. 1952. Describes as new: *P. cincinnatalis* (Cincinnati, Ohio), *P. freemanalis* (Brownsville, Tex.), and *P. ænescentalis* (Ottawa, Ont.), and removes *P. arsaltealis*, *euphæsalis* (with doubtful synonym *subjectalis*), and *magniferalis* (with synonyms *fascialis* and *guttulosa*) from synonymy of *illibalis*. Keys and figures. [E.M.]
- Munroe, Eugene, "The eastern North American subspecies of the barberry geometrid (Lepidoptera)." *Canad. Ent.*, vol.86: pp.282-283, 4 figs. 10 June 1954. Describes as new *Coryphista meadi atlantica* (Irvington, N.J.), and discusses distribution and variation of this and the nominate ssp. [E.M.]
- Munroe, Eugene, "A new *Pblyctænia*, with notes on two related species. (Lepidoptera: Pyralidæ)." *Canad. Ent.*, vol.86: pp.428-431, 4 figs. 22 Oct. 1954. Describes as new *P. quebecensis* (Lac Mondor, near Ste. Flore, P.Q.); sinks *tertilis* to *coronata* Hufnagel as a ssp.; raises *dionalis*, with syns. *nisæecalis*, *oppilalis*, and *beddeci* to ssp. of *extricalis*. [E.M.]
- Munroe, Eugene, "A new pyralid of Palæarctic affinities from Colorado (Lepidoptera)." *Canad. Ent.*, vol.86: pp.499-500, 3 figs. 15 Dec. 1954. Describes as new *Metaxmeste nubicola* (Hall Valley, Park Co., Colo.). [E.M.]
- Obraztsov, Nicholas, "Notes on the genus *Aterpia* Gn. (= *Esia* Heinr.)." *Ent. News*, vol.62: pp.276-278. 1951. Shows that HEINRICH'S genus *Esia* is a junior synonym

- of *Aterpia* Gn.; that *Aterpia* has one nearctic and three palearctic species; and that *charpentierana* (Hbn.) is predated by *corticana* (Schiff.). [J.T.]
- Obraztsov, Nikolaus, "Systematische Aufstellung und Bemerkungen über die paläarktischen Arten der Gattung *Dicrorhampha* Gn. (Lepidoptera, Tortricidae)" [in German]. *Mitt. Münchn. Ent. Ges.*, vol.43: pp.10-101, 50 figs. 1 July 1953. Revision of 68 Palearctic species: systematic notes, redescription, distribution, synonymy, bibliography, genitalia. Describes as new: subgenera *LIPOPTYCHODES* (type *bugnionana* Dup.) and *DICHRORHAMPHODES* (type *guenéeana*, new name for *politana* Gn. nec Schiff.); spp. *D. (Dicrorhampha) coniana* (Konia, Anatolia), *D. (D.) forsteri* (Luitpoldhaus, Allgäu), *D. (Lipoptychodes) pfisteri* (Steinernes Meer, Salzburg Alps), *S. (L.) klimeschi* (Altipiano Mantasio, Giullean Alps, Italy); ssp. *D. (Dicrorhampha) simpliciana heuseriana* (Kaiserlautern, Pfalz), *D. (Lipoptycha) resplendana eidmanni* (Volkmarshausen, N. W. Germany). New synonym: *D. (Lipoptycha) sylvicolana* Hein. (= *arata* P. & M.). [N.O.]
- Obraztsov, Nicholas, "A new species of *Hyalotba* Butler and a key to the species of the genus (Lepidoptera, Ctenuchidae)." *Amer. Mus. Novit.*, no.1630: 3 pp. 4 Sept. 1953. Describes as new *H. (Paraceryx) malaitaensis* (Malaita, Solomon Is.). [P.B.]
- Obraztsov, N. S., "Two new species of the *Amata tenuis* group (Lepidoptera, Ctenuchidae)." *Bull. Ann. Soc. Ent. Belg.*, vol.90: pp.227-232, 3 figs. Aug. 1954. Describes as new *A. (A.) paratenus* (S. coast of Java) and *A. (A.) subtenus* (E. Celebes). [P.V.]
- Obraztsov, Nikolaus, "Zur Nomenklatur der gewöhnlich als *Schranksia* HS., *Hyperodes* Gn. (Phalænidae), *Lythria* Hb. (Geometridae) und *Cledeobia* Sph. (Pyralididae) bekannten Gattungen" [in German]. *Nachrbl. Bayer. Ent.*, vol.3: pp.81-86. 15 Sept. 1954. Discusses nomenclature, types and synonymy. [N.O.]
- Obraztsov, Nicholas, "Notes on *Eressa confinis* and allied species with descriptions of a new species and a new subspecies (Ctenuchidae)." *Lepid. News*, vol.8: pp.135-139, 3 figs. 20 Oct 1954. Describes as new *E. c. szechueniensis* (Sun-fu, Szechuen, W. China); *E. javanica* (Mt. Gede, Java, 9000').
- Overlaet, F. G., "*Cymothoe sangaris* Godart et ses formes voisines" [in French]. *Bull. Ann. Soc. Ent. Belg.*, vol.90: pp.32-33. 28 Feb. 1954. Description of *C. eubalioides candidata* geogr. race nov. (Belgian Congo: Uele) and notes on *C. sangaris* (Nymphalidae) and its populations in Equatorial Africa. [P.V.]
- Overlaet, F. G., "Note sur le genre *Euryphene* Westwood (Limenitinae) africains" [in French]. *Bull. Ann. Soc. Ent. Belg.*, vol.90: pp.215-218. August 1954. For the author, the genera *Euryphene* and *Euphædra* Hb. are good genera characterized by the scheme of the markings, the profile of the wings, and the very marked sexual dimorphism. [P.V.]
- Overlaet, F. G., "Satyrides africains nouveaux" [in French]. *Lambilliona*, vol.54: pp.41-44, 3 figs. 25 Aug. 1954. Descriptions of three new *Ypthima* from the Belgian Congo: *Y. pulchra* (Katanga), *Y. præstans* (Tshiole), and *Y. diplommata* (Kafakumba). [P.V.]
- Overlaet, F. G., "Trois Rhopalocères africains nouveaux" [in French]. *Ann. Mus. Roy. Congo Belge, ser. in 4°, Sci. Zool.*, n.s. vol.1: pp.490-493, 10 figs. 1954. Descriptions of three new species of butterflies from Katanga (Belgian Congo): *Euryphene schoutedeni* (Nymphalidae), *Mycalasis schoutedeni* (Satyridae), *Acraea schoutedeni* (Acraeidae). [P.V.]
- Pearson, E. O., "The relationship between the African and South American red boll-worms of cotton, *Diparopsis* and *Sacadodes*." *Empire Cotton Growing Rev.*, vol.31: pp. 171-177, 1 fig. July 1954. The correct name for *D. perditor* is *D. watersi* (Rothschild). Compares *S. pyralis* with *Diparopsis* spp. and concludes that genera are closely related but distinct on genitalic characters. Discusses biology of the genera, with particular reference to the possibility of using *Sacadodes* parasites against *Diparopsis*. [P.B.]
- Pinker, Rudolf, "Beobachtungen in den Julischen Alpen" [in German]. *Zeits. Wiener Ent. Ges.*, vol.38: pp.117-181, 2 figs. 15 July 1953. Field observations in 1951. Describes as new: *Lita thurneri* (figures moth and ♂ genitalia) and *Cidaria nobiliaria juliensis*, both from Monte Montasio. [N.O.]
- Reiss, Hugo, "Zygænenrassen (Lep.) der alpinen Stufe der Ost-Dolomiten und ihr vermutliches Entstehungsalter" [in German]. *Zeits. Wiener Ent. Ges.*, vol.38: pp.261-270, 1 pl. 15 Oct. 1953. Discusses geological age and variation of some alpine *Zygæna* species. Describes as new: *Z. achilleæ ladinia* (Col. Pralongia, Ladinia, E. Dolomites) and *Z. filipendulæ wiegeli* (Col. Pradat, Ladinia); also a variety of *Z. purpuralis nubigena*. [N.O.]

- Remington, Charles L., "A new name for the Colorado race of *Pieris napi*." *Lepid. News*, vol.8: p.75. 17 Sept. 1954. Proposes *P. n. macdunnoughii* n.n. for *P. n. pseudonapi* B. & McD. (*nec* Verity).
- Rungs, Ch., "La chenille arpenteuse de l'Acacia à tanin" [in French]. *Service de la Défense des Végétaux au Maroc, Travaux Originaux* no.5: 55 pp., 5 pls. Aug. 1954. Systematic and morphological study, life history, and ecology of *Tephрина pulinda deerraria* (Geometridæ), a pest of *Acacia mollissima* in Morocco. [P.V.]
- Sieder, Leo, "Vorarbeit zu einer Monographie über die Gattung *Solenobia* Z. (Lepidopt. Psychidæ-Talæporiinae)" [in German]. *Zeits. Wiener Ent. Ges.*, vol.38: pp.113-128. 15 May 1953. Describes as new: *S. thurneri* (Norish Alps), *S. klimeschi* (Lienz Dolomites), *BREVANTENNIA* n. subg. (type *iriglavensis* Rbl.), *S. (B.) reliqua* (Carinthia). Diagnoses of *Solenobia* females. [N.O.]
- Smith, Stanley G., "Reproductive isolation and the integrity of two sympatric species of *Choristoneura* (Lepidoptera: Tortricidæ)." *Canad. Ent.*, vol.85: pp.141-151. 15 April 1953. Discusses *in extenso* possible isolating mechanisms between *C. pinus* and *C. fumiferana*. Notes that geographic, temporal, ecological, and sexual isolation all are partially effective, but contends that temporal isolation is the most important under ordinary conditions. [E.M.]
- Smith, Stanley G., "A partial breakdown of temporal and ecological isolation between *Choristoneura* species (Lepidoptera: Tortricidæ)." *Evolution*, vol.8: pp.206-224. Sept. 1954. *C. fumiferana* and *C. pinus*, on Balsam Fir and Jack Pine respectively, normally do not overlap in flight periods. The absolute failure of interspecific matings during an unusual overlap shows that sexual isolation is the effective mechanism keeping the species separate, even though interspecific mating has been obtained in the laboratory. [P.B.]
- Stallings, Don B., & J. R. Turner, "Notes on *Megathymus neumogeni*, with description of a new species." *Lepid. News*, vol.8: pp.77-82, 5 pls. 17 Sept. 1954. Describes as new *M. baueri* (Verde Hot Springs, 4000', Ariz.)
- Stempffer, H., "Considerations sommaires sur le genre *Pseuderesia* Butler (Lepid. Lycenidæ)" [in French]. *Ann. Mus. Roy. Congo Belge, ser. in 4°, Sci. Zool.*, n.s. vol.1: pp.523-525, 6 figs. 1954. Summary study of the ♂ genitalia of *Pseuderesia*. The genitalia of *eleaza*, *osheba*, *isca*, *bicolor* are all very different; those of nine other species are of the same type, near some *Mimacræa* and very different from those of the first four species cited. [P.V.]
- Stempffer, H., "Contribution à l'étude des Lycenidæ de la faune éthiopienne (Lep.)" [in French]. *Bull. Soc. Ent. France*, vol.59: pp.88-93, 2 figs; pp.104-113, 1 pl., 4 figs. July, Nov. 1954. Considerations on various species of Lycenidæ of the African fauna, with descriptions of new species and subspecies: *P. drucei drucei* (Cameroon), *P. d. ugandæ* (Uganda); *Liptena (Tetrarhanis) rougeoti* (Gaboon); *Dendorix (Diopetes) aurivilliusi* (Sierra Leone), *D. (Diopetes) fumata* (Gold Coast); *Lepidochrysops intermedia cottrelli* (N. Rhodesia); *Euchrysops browni* (Belgian Congo). [P.V.]
- Stempffer, H., "A revision of the genus *Aphnæus* Hübner (Rhopalocera: Lycenidæ)." *Trans. Roy. Ent. Soc. London*, vol.105: pp.493-516, 2 pls., 18 figs. 31 Dec. 1954. Describes as new *A. nyanzæ* (Katera, Sango Bay, Uganda); *A. erikssoni mashunæ* Gadzima, Umfuli R., Mashonaland); *A. e. barnesi* (Christmas Pass, S. Rhodesia); *A. jacksoni* (Labwor Hill, Karamoja, Uganda); *A. adamsi* (Bitje, Ja River, Cameroons); *A. flavescens* (Limbe, Nyasaland); also several "forms". Redescribes all known spp. Figures adults of some spp. and ♂ genitalia of most. [P.B.]
- Thompson, W. R., "The philosophical foundations of systematics." *Canad. Ent.*, vol.84: pp.1-16. 30 Jan. 1952. Discussion of systematic concepts from standpoint of Thomistic philosophy. [E.M.]
- Toll, S., "*Nephodesme pyrenaica* spec. nova (Lepidoptera, Tortricidæ)" [in French]. *Bull. Soc. Ent. Mulhouse* 1954: pp.45-47, 5 figs. July-Aug. 1954. Description of *N. pyrenaica* n.sp. from the Pyrenees (S. France), allied to *N. canescens* Gn. [P.V.]
- de Toulgoet, H., "Description d'Arctiidæ nouveaux de Madagascar (Lep.)" [in French]. *Mém. Inst. Sci. Madagascar, ser. E*, no.4 (1953): pp.345-359, 1 pl., 11 figs. 1954. Descriptions of Arctiidæ Nolinæ and Lithosiinæ from Madagascar: *Roeselia venosalis*, *R. leucomelas*, *Eilema lemur*, *E. rubiginea*, *E. contradicta*, *E. hova*, *E. heimi*, *E. xantholenca*, *E. catalai*, *Asura vadoni*, *Philenora ocellaris*, *P. bipunctoides*. [P.V.]
- Urbahn, Ernst, "Was versteht man unter *Melitæa hormuzaki*?" [in German]. *Zeits. Wiener Ent. Ges.*, vol.38: pp.149-152, 1 fig. 15 June 1953. Supposes it to be a synonym of *M. atbalia diamminoides* Vrtý. [N.O.]
- Viette, P. E. L., "Descriptions de quatre nouvelles espèces malgaches de Noctuidæ quadrifides (Lepid.)" [in French]. *Lambillionea*, vol.54: pp.9-13, 2 figs. Sept. 1954.

- Descriptions of four new species of Noctuidæ from Madagascar: *Epicausis splendens*; *E. catalai* (Diphtherinæ; from the eastern rain forest); *Xanthodesma remyi* (eastern rain forest); *Hypsiforma seyrigi* (Ophiderinæ; from the south). [P.V.]
- Viette, P., "Le colloque international sur la nomenclature zoologique (Copenhagen, 1953)" [in French]. *Lambillionnea*, vol.54: pp.25-32. Sept. 1954. Notes on the international colloquium on zoological nomenclature at the Copenhagen Congress, 1953.
- Viette, P., "Nouveaux Thyrididæ de Madagascar (Lep.)" [in French]. *Bull. Soc. Ent. France*, vol.59: pp.118-122, 5 figs. Nov. 1954. Descriptions of new species of Thyrididæ from different parts of Madagascar: *Rhodoneura subopalina*, *R. translucida*, *R. chopardi*, *R. memorabilis*, *Striglina antiopa*, *Betousa milloti*, *Dixoa jeanneli*. [P.V.]
- Viette, P. E. L., "Descriptions de quelques nouveaux Drepanidæ, Notodontidæ et Noctuidæ africains et malgaches (Lépid.)" [in French]. *Ann. Mus. Roy. Congo Belge, ser. in 4°, Sci. Zool.*, n.s. vol.1: pp.553-559, 16 figs. 1954. Descriptions of new moths from Africa and Madagascar. Drepanidæ: *Spidia primoti* (Gaboon); *Epicampoptera olivacea* (Gaboon). Notodontidæ: *Polelassotbys callista abyssinica* (Abyssinia); *Hoplitis dasychirina quadratus* (Abyssinia); *Fentonina schoutedeni*, *F. bergeri* (Belgian Congo); *Anthena birbirana* (Abyssinia), *A. benguelana* (Angola). Noctuidæ Ophiderinæ: XYMEHOPS and its type, *X. nigra* (Madagascar); CATALANA and its type, *C. vobilava* (Madagascar). [P.V.]

C. MORPHOLOGY AND CYTOLOGY

- Bailey, S. W., "Hardness of arthropod mouthparts." *Nature*, vol. 173: p. 503. 13 March 1954. Reports hardness of 3 for mandibles of *Pteroloscura* caterpillar and some other insects. [P.B.]
- Carpentier, F., "Nervure surnuméraire chez des intersexes mâles de *Lymantria dispar* L. (Lépidopt. Hétéroc.)" [in French]. *Bull. Ann. Soc. Ent. Belg.*, vol.90: pp.233-236. Oct. 1954. Supplementary veins in intersexual males of *L. dispar*. [P.V.]
- Denuce, J. M., & G. Vandermeersche, "Étude au microscope électronique des trachées des larves d'insectes" [in French]. *Exptl. Cell Res.*, vol.6: pp.76-78, 2 figs. Feb. 1954] Structure of tracheæ of *Galleria mellonella* larvæ.
- Diakonoff, A., "Considerations on the terminology of the genitalia in Lepidoptera." *Lepid. News*, vol.8: pp.67-74, 2 figs. 17 Sept. 1954.
- Diakonoff, A., "Reply to the Forbes 'Notes'." *Lepid. News*, vol.8: p.169. 7 Jan. 1955.
- Du Porte, E. Melville, "The procephalon: a critique of recent interpretations." *Canad. Ent.*, vol.85: pp.41-55, 8 figs. 11 March 1953. No specific discussion of Lepidoptera. [E.M.]
- Foltin, Hans, "Agha tau L. und ihre dunklen Formen in Oberösterreich. Berichtigung" [in German]. *Zeits. Wiener Ent. Ges.*, vol. 33: p. 137. 1 Dec. 1948.
- Forbes, Wm. T. M., "Notes on the terminology of the lepidopterous male genitalia." *Lepid. News*, vol.8: pp.167-168. 7 Jan. 1955.
- Golbach, R., "Notas sobre algunos insectos teratológicos" [in Spanish, German summary]. *Acta Zool. Lilloana*, vol. 10: pp. 189-196, 1 pl., 2 figs. 1952. Describes and figures specimen of *Atrophaneura zacyanthus* with defect in one wing. [P.B.]
- Henke, Karl, "Einfache Grundvorgänge in der tierischen Entwicklung I. Über Zellteilung, Wachstum und Formbildung in der Organentwicklung der Insekten" [in German]. *Naturwiss.*, vol. 34: pp. 149-157, 180-186, 14 figs. "1947" [Feb., March 1948]. Study of scale development in *Ephestia kübniella* and wing development in *Drosophila*. [P.B.]
- Henke, Karl, "Einfache Grundvorgänge in der tierischen Entwicklung II. Über die Entstehung von Differenzierungsmustern" [in German]. *Naturwiss.*, vol. 35: pp. 176-181, 203-211, 239-246, 19 figs. "1948" [Dec., 1948; Jan., Feb. 1949]. Study of pattern development in wings of Lepidoptera. [P.B.]
- Ivanova, T. S., "Innervation of the silk gland and the anatomical structure of its unpaired excretory duct in the tussah moth *Antheraea pernyi* Guer." [in Russian]. *Ent. Obozr.*, vol.33: pp.198-200. 1953. [Not seen].
- Malcolmson, Richard O., "Arthropod teratology." *Canad. Ent.* vol.85: pp.313-315, 2 figs. 30 Sept. 1953. Figures and briefly describes a bilateral gynandromorph of "*Samia*" *cecropia*. [E.M.]
- Piepho, H., "Über die Ausrichtung der Schuppenbälge und Schuppen am Schmetterlingsrumpf" [in German]. *Naturwiss.*, vol.41: p.22, 2 figs. Jan. 1955. Orientation

- of scales on body of *Galleria mellonella* reversed by rotation of a piece of larval body wall. [P.B.]
- Pohley, H. J., "Über das Wachstum der Imaginalanhänge des Hinterflügels von *Ephestia kübniella* und die Annahme selbständig mutationsfähiger Unterheiten in den Chromosomen" [in German]. *Naturwiss.*, vol.41: pp.483-484. Oct. 1954. Increase in cell number in hindwing rudiment of *E. kübniella*. [P.B.]
- Schvanvich, B. N., "Patterns of Lepidoptera, chiefly of Heterocera" [in Russian]. *Zool. Zhurn.*, vol. 32: pp. 874-885. Sept./Oct. 1953. [Not seen].
- Sibatani, Atuhiro, Masami Ogata, Yoshio Okada, & Hiromu Okagaki, "Male genitalia of Lepidoptera: morphology and nomenclature. I. Divisions of the valvæ in Rhopalocera, Phalaenidæ (=Noctuidæ), and Geometridæ." *Ann. Ent. Soc. Amer.*, vol. 47: pp. 93-106, 2 pls. March 1954. Discusses homology of parts of valves in these three groups; describes the plan of the valves and their modification, and presents a list of redefined terms which should be used for the parts. [P.B.]
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D. VARIATION AND GENETICS

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E. DISTRIBUTION AND PHENOLOGY

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G. PHYSIOLOGY AND BEHAVIOR

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