

# The Lepidopterists' News

THE MONTHLY NEWSLETTER OF THE LEPIDOPTERISTS' SOCIETY

P. O. Box 104, Cambridge 38, Massachusetts, U. S. A.

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Volume II

January 1948

Number 1

With the present issue the NEWS begins its second volume and the Society enters a new year. For new members a brief account of Society activities in 1947 is presented.

After discussions and planning for nearly a year H. K. Clench and the present editor mailed a mimeographed letter on March 24, 1947, to about 350 American Lepidopterists whose addresses were assembled from various sources. Later, as more addresses were obtained, many other copies of the letter were sent out. By the end of 1947 there were 222 Charter Members of the Society, including 12 members in 7 foreign countries, provided for by American friends, and subscriptions were being sent to 11 libraries. The generosity of 31 members in giving extra funds resulted in solvency for 1947. The Society issued 8 monthly numbers of the NEWS, containing a total of 100 pages and 3 pages of indices. Mr. Clench's change of residence to Michigan forced him to discontinue co-editorship in September. The December number was devoted largely to the first Annual Field Season Summary of Lepidoptera for North America. Special matters during the year included: the Articles of Organization (p.2), the Board of Specialists (pp.13-14), Host Plant Identification Service (p.25), promotion of rearing and distributing living material (pp.37,62, etc.), and the Membership List. A series of book reviews and brief biographies was presented in order to provide a background of Lepidopterology for inexperienced members. An annotated list of recent papers on Lepidoptera from the world literature was given in the hope of aiding all members.

These features will be continued in Vol. II and others added. Please turn to page 10 for the present Board of Specialists. Lithoprinting will permit a 30% increase in reading matter as well as free illustrations. Also it will constitute publication on a nomenclatorial basis, but no new taxonomic material (new species, etc.) will be accepted, at least in Vol. II. Usually only solicited articles are desired for the NEWS and it is intended that these be chiefly of the review sort. The complete membership roll is planned for October, and the Season Summary will probably be later and larger than in 1947 and appear as a NEWS supplement. Vol. II will be issued monthly except during July, August, and September.

In spite of the preponderance of North American members, it is earnestly hoped that members in other areas will be active in the Society. Notes, opinions, and additions to the literature listing will be warmly welcomed. Suggestions for sound development in an international direction are invited.

## GEORGE SHIRLEY BROOKS

The death of George Shirley Brooks on Monday, November 3rd, 1947, has removed yet another of those hobbyists who have done so much to advance our entomological knowledge.

Born in Suffolk, England, in 1872, even in his youth Shirley Brooks showed that intense interest in Nature that was to be a controlling factor in the use of his leisure hours. For a time he specialized in Diptera, but finding that order in such confusion, returned to his first love, butterflies. His keen collecting added a number of species to the Manitoba list and several new ones to Science.

Coming to Canada in 1911 he spent a few months farming and then entered the service of the Canadian National Railways in Transcona, Manitoba. Quiet and retiring, he continued his studies of the local butterflies, until the formation of the Natural History Society of Manitoba - in which he took a prominent part - compelled him to assume a position of leadership. Always important at meetings of the Society, he was never too busy to help those who sought aid or advice, and at his summer home at Victoria Beach, Manitoba, the door was always open to anyone interested in entomology or indeed in any branch of Natural History. Following his superannuation in 1937, he divided his time among the Manitoba Museum, expeditions to such places as Churchill, and his own collections.

His special interest in the Manitoba Museum was shown by his gift to that institution of an almost complete collection of Manitoba butterflies in beautiful condition. His loss to the M.N.H.S. is a very severe blow as he was perhaps its hardest working member, serving as President, and as secretary for many years.

Shirley Brooks was first and last a collector. He loved being out in the sunshine, net in hand, among the trees and flowers searching for perfect specimens which he mounted with consummate artistry. He was not interested in describing new species and it was only with difficulty that he could be persuaded to prepare his list of the butterflies of Manitoba, published in the Canadian Entomologist, LXXIV:pp.31-36, February, 1942.

J.B. Wallis - Winnipeg.

The recent meetings (Dec. 27-31) of the American Association for the Advancement of Science in Chicago included the annual meetings of several A.A.A.S. member societies of interest to Lepidopterists. Here are a few comments on these societies and specific papers.

The ENTOMOLOGICAL SOCIETY OF AMERICA had its best paper-reading sessions in the last three years. Dr. Alvah Peterson of Ohio State University exhibited and explained a valuable method of killing and preserving insect larvae in the field so that straight, well-extended specimens can be obtained easily. This will be given elsewhere in the NEWS. Dr. R.L. Post of North Dakota State College showed an efficient and accurate apparatus for making drawings of microscopic material with a projection prism. Dr. A.C. Cole of the University of Tennessee gave a preliminary report on insects found on Bikini Atoll after "Operation Crossroads". He found all the species of butterflies known from the area very common on Bikini and other islands of the Atoll and apparently unaffected by the Atomic Bombs. Dr. C.M. Williams of Harvard University reported on endocrinology of Platysamia cecropia larvae. Dr. Z.P. Metcalf, retiring president of the E.S.A., read a paper on "Static vs. dynamic nomenclature", calling for the latter, of course, including a ready acceptance of necessary name changes rather than the common irritation and reluctance regarding the abandonment of a well-known name. Dr. J.C. Bradley, of Cornell University, brought out the necessity of citing the true distribution of insects. Instead of the old method stating, for example for Speyeria atlantis, "Labrador to Virginia, west to British Columbia and California," the correct citation should read "Labrador to British Columbia, southward to New York, Michigan and North Dakota, and in the mountains to Georgia, Nebraska, Colorado, and California." The former method would lead a collector to expect atlantis in Kentucky and Missouri, where it does not occur at all. Dr. C.W. Sabrosky of the U.S. Bur. of Entomology and Plant Quarantine discussed eloquently current needs in nomenclature, on which he is an authority. He urged full support of the International Code of Zool. Nomenclature, but suggested a number of urgently-needed changes. He called for strong self-discipline in avoiding straying from the Rules. One of the points needing emphasis is that many excellent taxonomists are very poor nomenclaturists. In its business meeting the E.S.A. took a very desirable step in establishing an insect physiology foundation to issue a new Journal of Insect Physiology under a plan formulated primarily by Dr. J.F. Yeager and Dr. A.C. Richards. The E.S.A. tentatively rejected the invitation to join the new American Institute of Biological Sciences, after a warm discussion following which the proponents of expediency and a pressure-group were defeated in the voting. Dr. A.W. Lindsey resigned from editorship of the Annals because of pressure of work and no successor was announced. Dr. H.H. Knight, Hemipterist, of Iowa State College, was elected the new president of the Society.

The new SOCIETY FOR THE STUDY OF EVOLUTION held its second annual meeting this year and its program had several papers of importance to anyone interested in speciation. The stand-out was the symposium on Natural Hybridization presented by four of the most interested authorities on the subject. Other papers dealt with serology in taxonomy, sexual psychology between species of insects, chromosome  Races, and the role of climate in producing races.

The proposed SOCIETY FOR SYSTEMATIC ZOOLOGISTS held an organizational meeting which had a surprisingly large attendance and appears to be a going concern. Systematic Zoologists desiring to join should send their name, address, field of interest, and \$1.00 to: Dr. G. W. Wharton, Duke University, Durham, North Carolina.

The GENETICS SOCIETY OF AMERICA meetings included many papers indirectly related to Lepidoptera study. Dr. William Hovanitz, of the University of Michigan, reported on "Differences in the Field Activity of the Two Colias Color Phases-at Various Times of the Day." Unfortunately we had to catch a train before this paper was given, so we know no details.

Mr. Francis Hemming, Secretary of the International Commission on Zoological Nomenclature, and a noted Lepidopterist, talked informally at a special meeting. He reviewed the history of the Commission, explained many of the very difficult problems it is now facing, largely administrative, rather than nomenclatorial, and then told of some things the Commission will do in the future and some which it hopes to do. He said the Commission is preparing a small volume which will give the official corrected version of the Rules (in French), the English translation, and summaries of the Opinions rendered. The book will cost \$2.00 and will be issued after the International Zoological Congress in Paris in July, in order that any changes of the Code which are enacted at the Congress may be included. All of Mr. Hemming's listeners left the meeting with a better understanding of the difficulties under which the Commission must function. His visit to the U.S.A., at a time when feeling was very strong against certain activities of part of the Commission, has certainly promoted much-needed good will here.

Among the Lep. Soc. members at the Chicago meetings were: L. Banks, Prof. W.T.M. Forbes, W.J. Gerhard, P.A. Glick, Dr. Wm. Hovanitz, Dr. C.D. Michener, P.S. Remington, F.C. Werner, C.E. Wood, and A.K. Wyatt, and probably others whom we did not see.

C.L.R.

## ON THE SO-CALLED "LOWER" TAXONOMIC CATEGORIES

by Sergius G. Kiriakoff

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Students of the order Lepidoptera are well acquainted with the very important specific variability existing among these insects. They are not unacquainted with the technical terms mostly used, such as subspecies, aberration, variety or form. But there is unfortunately no doubt that most of these terms have been and still are used somewhat at random, and some difficulties are likely to arise whenever one becomes aware that a technical term must be applied only to a definite and corresponding taxonomic category. So it might be useful to give a short account of what these taxonomic categories are and which sorts of specific variability have the right to be considered as taxonomic categories.

First, it must be clearly understood that taxonomic categories alone can claim protection under the International Rules of Zoological Nomenclature. In other words, scientific (i.e. Latin) names must be given only to forms which are apt to be classified as belonging to a taxonomic category. This is of paramount importance because not every variation can be so classified, and variations which cannot, must not be given Latin names.

A taxonomist conscious of his task is not content to build his system solely on morphological bases. He simply cannot ignore what has been done in the other branches of the great science of Biology, and if he does not use the data gathered by the Geneticists, Cytologists, Ecologists, and so on, he is doomed to lag hopelessly half a century behind his time.

There is only one systematic category below the species mentioned in the International Rules. This is the "subspecies". This is obviously insufficient. We must go much farther, the more so as there is no "official" definition of the subspecies. We must either ignore this term altogether, or give it a collective meaning, including in it all the systematic categories placed hierarchically below the species. Personally, I would suppress it altogether, because I do not consider the so-called subspecific categories as being in any way inferior to the species; they are rather included in it and placed so to speak on the same horizontal plane, each of them being the sole representative of the species in a given region, habitat or any other milieu. Moreover, there are various sorts of species. It is now generally admitted that monotypic, polymorphic and polytypic species can be recognized, and I refuse to consider, for example, a geographic race as belonging to a lower hierarchical grade than a monotypic species. Instead of calling the discussed categories "subspecific", I choose to call them "intraspecific" (intra= within; not infra= below). And instead of speaking of "subspecies", I speak of "races", which is properly a genetical term, but much used these last years in systematics.

The members of the various races alone are entitled to scientific names. So we must try to define a taxonomic race. If we accept a recent definition (DOBZHANSKY), a race is a group isolated within a species and composed of individuals having certain characters in common. This is insufficient for our purposes and we must add, with BAUER and TIMOFEEFF-RESSOWSKY: "and occupying a definite distribution-area". This is called the "space-factor" and, with one exception, I consider it as a condition sine qua non for granting a race the rank of a systematic category. The words "distribution-area" must be taken in a very broad sense; they not only include geographical or micro-geographical regions, but also all the particular biotopes, such as brackish or sweet water, sunny or shadowy side of a hill, different host plants, different hosts of parasitic animals, etc. The variants corresponding to the above definition are "heterotopic" variants and are entitled to scientific names. They include the geographical and the biological (ecological) races. Much has been said about the precariousness of such division. Dr. MAYR has written a few quite convincing pages about the fact that biological races are but a part or an aspect of the geographical ones. It is true that the limit between these two is not always easy to locate, but, where the Lepidoptera are concerned, this is usually easy, even in cases where the distinction is not merely a matter of different host plants. So I think it advisable to keep both the geographical and the ecological races as intraspecific categories. A third category must be recognized for a few particular cases, viz. for species having parthenogenetical races besides the sexual ones. In some of these cases (as with certain Orthoptera) the geographical factor plays a part as well; elsewhere (certain Psychidae) its intervention is more doubtful. As these cases of parthenogenesis usually seem to be a result of polyploidy (mostly tetraploidy of the parthenogenetic females), we call such races "cytological". In some aspects they are akin to the biological races, as they present reproductive peculiarities.

No other races can be recognized as taxonomic categories, at least in the present state of our knowledge. The so-called chromosome-races are known to exist (the moth Phragmatobia fuliginosa), but we have so far no practical means to identify such races and have to put them aside.

The remaining forms of collective (seasonal, sexual) or individual (the so-called "formae" or aberrations") variation cannot be treated as taxonomic categories and no scientific names should be applied to them. There is no doubt that they may differ widely genetically, that besides mere somations or non-hereditary forms, there are many mutants, even genetic races (e.g. the dominant melanistic mutants of some moths), but in all these cases sufficient ground is wanting for the recognition of such forms as taxonomic categories. In some cases, as e.g. for the polymorphic females of certain butterflies, and for the seasonal forms, or even for the melanistic mutants just alluded to, - names could be retained for purely practical purposes. But one always must bear in mind that such names are not scientific ones and cannot claim protection under the existing rules. They should be written without the author's name, between parentheses or inverted commas, and preceded by the appropriate indication concerning their nature, thus: - Colias eurytheme Bdv. & Lec. (♀ f. "alba"); Papilio marcellus Boisduval (aest. "lecontei"), etc.

With regard to the individual variations, i.e. those not connected with a definite brood, sex, region or biotope, even the above method of using particular names must be abandoned. Such variations have no right whatever to be named, not only because such names are a useless burden, but chiefly because they usually are given only to striking or well-defined variants. Intermediate forms and those with inconspicuous characters are left aside, let alone the forms with cryptic genotypical differences. As there is no possibility to name every more or less aberrant form, no one should be named.

Another intraspecific category is that of the cline (see HUXLEY). In many cases the clines only have an auxiliary value; the use of clines, however, could be much extended, and especially with regard to the Lepidoptera; indeed, many recent faunistic works (i.e. on Mammals) have shown that such a course is not to be disregarded. Successful attempts can, too, be found in FORD's recent book on the British Butterflies (see NEWS I: p.3). Anyway, the use of clines presupposes a thorough knowledge of geographical distribution and of the corresponding variability. Clines have been used so far only for geographical races. Clines should be named, though of course unofficially.

Besides the intraspecific taxonomic categories discussed above, I recognize another complex of so-called "lower" categories, which I term "circumspecific" categories. These comprise the semi-species, the species proper and the ultra-species. The last is the term I use in preference to "super-species" (also called "supraspecies"), on the same grounds as those which have determined me to abandon the term "subspecies".

The semi-species consists of forms which may be partially conspecific, along with others doubtfully specifically separable, evidently of a common origin, and with others which to all purposes are "species in statu nascendi". An example of semi-species is furnished by the small European Blue: Everes argiades Pallas with its partially independent forms E. alcetas Hoffmansegg and E. decolorata Staudinger (cf. LORKOVIC).

The species proper cannot, I think, be split into subdivisions. At least, the terms "monotypic", "polymorphic" and "polytypic" species cannot be regarded as taxonomic categories.

The ultra-species consists of species or specific complexes of a common origin, which have reached an undoubted specific status, but are closely related, showing in many cases a geographical vicariousness, when the ultra-species is an equivalent of the "subgenus geographicum" of some authors ("Artenkreis" of RENSCH). However, it is in fact more than that as it is not built on geographical principles alone (cf. KIRIAKOFF).

The semi-species and the ultra-species should be named, though unofficially (as is the case with the cline).

The question of the nomenclature of the intra- and circumspecific taxonomic categories presents certain practical difficulties. I think, however, that these can be solved and propose to discuss the nomenclatorial question in another contribution to this review.

#### LITERATURE

- BAUER, H. and N.W. TIMOFEEFF-RESSOWSKY: Genetik und Evolutionsforschung bei Tiere (in: Die Evolution der Organismen) Jena, 1943.  
 DOBZHANSKY, T.: Genetics and the Origin of Species, New York, 1937, revised ed. 1941.  
 FORD, E.B.: Butterflies (in: The New Naturalist), London, 1945.  
 HUXLEY, J.S.: Clines: an Auxiliary Method in Taxonomy, Bidr. Dierk. 27, 1939.  
 KIRIAKOFF, S.G.: La Semi-espèce et la Super-espèce. Bull. Ann. Soc. Ent. Belg. (in print).  
 LORKOVIC, Z.: Studien über der Speziesbegriff. II. Artberechtigung von Everes argiades Pall. & c., Mitt. Münch. Ent. Ges. 28, 1939.  
 MAYR, E.: Systematics and the Origin of Species, New York, 1942.  
 RENSCH, B.: Zoologische Systematik und Artbildungsproblem. Verh. dtsh. Zool. Ges., 1933.

Review of "SYSTEMATIC CATALOGUE OF SPEYERIA (LEPIDOPTERA, NYMPHALIDAE) WITH DESIGNATIONS OF TYPES AND FIXATIONS OF TYPE LOCALITIES", by C.F. dos Passos & L.P. Grey

Ten years ago "Argynnis" stood even above Euphydryas, Melitaea, Brenthis, Phyciodes, and the Blues as the most confused genus confronting the American butterfly students. Different authors accepted a widely varying number of distinct species in the group, many supposed affinities were entirely wrong, and uncorrelated new "races" continued to be described. The challenge of ordering the chaos was grasped at that time by L. Paul Grey, who disposed of his excellent collection of North American Lepidoptera to devote all his time and space to the "Args". He was fortunate to be joined by C.F. dos Passos, who had the means, the equipment, and the methodical mind to scour the scattered literature, visit a number of museums to examine carefully the types, and study the numerous nomenclatorial problems. At that time the Hesperidae students had been remarkably successful in resolving virtually all taxonomic questions by means of investigations of the male genitalia. Moth specialists also leaned heavily on genitalic characters of both the male and female. But the Papilionoidea, and especially "Argynnis" and the Lycaenidae, were said to offer little or no taxonomic help in the genitalia. Grey's devotion to the project soon made him a highly skillful technician in preparing and studying the male genitalia of "Argynnis" and several other genera. Later he extended his investigation to the female genitalia as the need of supplementary clues became apparent. After several years of study, the authors wrote in 1945: "it is almost a rule in this genus that distant races will vary to nearly unrecognizable extremes", and in another 1945 paper they emphasized: "the excellent usefulness of the male genitalia in giving better classificational results than those hitherto attained by the use of wing pattern, especially in providing unfailing generic characters."

As a result of a genitalic survey of American, European, and Asiatic relatives of Argynnis, the authors found that all of the North American species were homogeneous and consistently differed from all the Old World Argynnis. Thus it was necessary to recognize for the American species a distinct genus, using the oldest available name, Speyeria (Scudder 1872), erected for S. idalia. Differences in the female genitalia indicated a further separation, which resulted in the revival of another Scudder name, Semnopsyche, as a subgenus of Speyeria.

A culmination of the long job was reached with the issuance on December 12, 1947, of the "Systematic Catalogue of Speyeria..." and with it a great service has been done for American Lepidopterists and the morphological groundwork laid for the biological studies of the future, when the genetic affinities can be worked out. The catalogue is a model of painstaking devotion to accuracy and thoroughness. For each accepted specific and racial name the original citation, the synonymy, reference to the type or another typical specimen if figured, type locality, location of the type, reference to early stages, and geographical distribution all are given. The authors dealt with 109 "valid" names and 58 synonyms. The 109 were considered to represent only 13 species, the other 96 being races. The species are as follows:

Speyeria (Speyeria) idalia, nokomis, edwardsii, coronis, zerene, callippe, egleis,  
atlantis, hydaspes, mormonia and Speyeria (Semnopsyche) diana, cybele, aphrodite

A few controversial points noted in the catalogue seem worthy of mention. 1) Neotype, lectotype, and type locality fixations are profuse. All three are valuable nomenclatorial procedures. However, neotypes in particular need firmly restrictive safeguards and the reviewer believes that one is that all neotypes must be simultaneously plesiotypes, which the present ones certainly are not. In addition, they must be from very close to the type locality and actually be topotypes if at all possible, and the primary type must be virtually certainly destroyed or lost. The latter precautions were presumably taken in this paper. A lectotype seems wholly unnecessary if a single "type" already exists and is so labelled, as appears to be true for several lectotypes in the present paper. Type locality fixations appear to be the most carelessly made here, especially in one glaring case in which Argynnis eurynome tr. f. brucei has its type locality fixed as "Denver, Denver County, Colorado". Any Colorado collector knows that eurynome is the most alpine Speyeria and never approaches the plains around Denver. Since Bruce was the collector, why not designate his favorite collecting ground, Hall Valley, as the type locality? Eurynome abounds up there. 2) The whole business of so dignifying aberrations as to rename homonyms, select type localities, etc. is highly controversial, in spite of Hemming's 1940 "decision"! In three cases Gunder's "transition forms" (= aberrations) were paroled up to a taxonomic status and used for races. However, such relatively minor matters do not fundamentally affect the fine advance made in the publication of the long-awaited Catalogue. Both authors have promised the reviewer that profusely-illustrated geographic analyses of the individual species of Speyeria will follow this catalogue.

C.L. Remington

In response to urgent requests by your editor, Mr. dos Passos has kindly made available a good supply of copies of the Catalogue for Lep. Soc. members who had not previously received it. These may be obtained from the NEWS office, one to a member, until the supply is exhausted. Please do not request a copy if Speyeria falls entirely outside of your interests, since the demand will probably exceed the supply. Please send 5 ¢ in stamps to cover mailing costs.

by Harry K. Clench

The word "aberration" is of current and general usage in the English language, but to Lepidopterists it has acquired a special significance, and the feature has become increasingly controversial to taxonomists and collectors. As defined for the Lepidoptera, an aberration is any specimen deviating markedly in pattern from the other members of its population, race or species, and usually of very rare occurrence, those deviations that are more common being generally called "varieties" or "forms". This definition is clearly that of an arbitrary condition, with its sole homogeneity resting in the fact that the deviation is rare and affects the pattern.

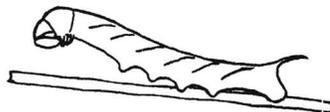
Our first task, therefore, is to make a bit clearer just what an aberration is. One of three general types of conditions may cause an aberration: 1) Environmental modification - extremes of temperature, humidity and other such factors have been proved often responsible for marked pattern deviation; 2) Genetic modification - mutation - is also frequently responsible for aberrations; 3) Pathological modification - it has been shown that disease occasionally is responsible for changes in the pattern of Lepidoptera. Of these three types, the first and third produce variation which is not heritable. The second gives rise to deviations which may be inherited and, granting favorable conditions in nature, ultimately adopted into the fabric of a species or race.

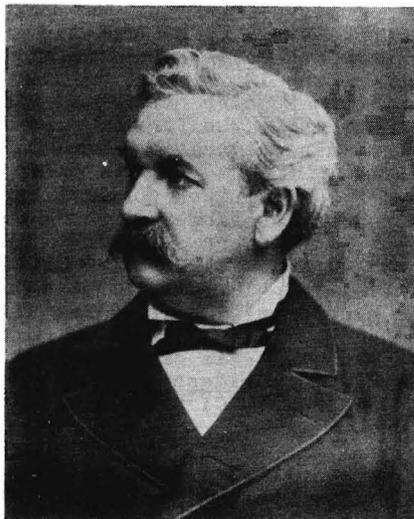
Some aberrants are strikingly - and intriguingly - different from the normal, and therefore have been eagerly sought by collectors and often as eagerly named and described. The rise in popularity of this last practice can be traced easily through the literature. A hundred years ago aberrants often were left unnamed in collections, unless they differed very greatly, when they were usually named - sometimes mistakenly as species. Scudder and Edwards and most others of their era at one time or another found and described some striking pattern deviations. Then perhaps forty or fifty years ago, in response to the rising wave of the practice in Europe engendered by the greatly diminished chances of discovering legitimately nameable species and subspecies, the naming of aberrations became increasingly popular in America. This hobby rose to a peak in the 1920's and 1930's, when J.D. Gunder advertised for, and bought and named aberrants from all over North America, and even erected a scheme for their classification based on types of variation. His classification, due to its inherent artificiality, and despite its rough practicability, was never widely adopted, though the term he devised to replace the, to him apparently distasteful, word "aberration" has lingered. "Transition form" is still to be found occasionally in the literature.

At the present writing the practice of giving a scientific name to an aberration is virtually dead on this side of the Atlantic, though the custom, perhaps deprived of some of its vigor, still prevails in Europe.

Though nearly every American Lepidopterist is aware of the disadvantages of naming aberrants, it must be pointed out in fairness that it has one practical advantage - the making known in publication of such variations. In the future much use will undoubtedly be made of pattern and other deviations from normal morphology and design in the fields of physiology and genetics, as well as in research on pattern structure and variation. The abnormalities shown in aberrations can be turned to good use in these fields, and it is thus desirable that as many as possible be made known. Such variations, however, can be made public without assigning names to them, a practice unfortunately rare. A few recent papers illustrate the growing weight of opinion among Lepidopterists that striking aberrations, especially of a type common to several related species, deserve to be made known, but not to receive names:

1. "Strymon falacer ab. heathi (Fletcher)" by D.B. Stallings and J.R. Turner (Ent. News 54: 131-132, pl. 2, 1943) not only describes these variations, comparing them with the "species" heathi Fletcher, and gives pertinent data on the specimens concerned, but presents an excellent photographic plate, with normal specimens for comparison.
2. "The Unusual Capture of a Melanistic Pieris napi L. (Lepidoptera)." by P.S. & C.L. Remington (Ent. News 54: 109-110, 1943) describes but does not name the unusual melanic, as well as rare white females of several species of Colias.
3. "Increased Variability Accompanying an Increase in Population in a Colony of Argynnis selene." by J. Tetley (The Entomologist 80: 177-179, pl. 3, 1947) presents valuable information on conditions producing a high percentage of aberrations and gives a photo of several aberrations, deliberately avoiding naming them.
4. Descriptions of two aberrations of Oeneis and one of Glaucopsyche, but no names given, by Y. Okada in Trans. Nippon Lepidopterological Soc. (I, Dec., 1945).





*H. Edwards*



#### BRIEF BIOGRAPHIES

##### 9. Henry Edwards (1830-1891)

Born in Ross, Herefordshire, on Aug. 27, 1830, Henry Edwards spent his early life in England, but little is known about his childhood. His father planned to have him become a lawyer, but after Henry's brief study in this field it became apparent that his interests lay elsewhere. He became a clerk in a London counting house for awhile, and also acted in amateur theatricals, a taste which soon started him on a life-long career on the stage. In 1835 he sailed to Australia to appear in several plays, and after an extended residence there, traveled in Peru, Panama, and Mexico, pursuing dramatic activities. In 1865 his colorful journeyings landed him in San Francisco, where for twelve years he was associated with the famous old California theatre. Most of his spare time was spent at the California Academy of Sciences, where he worked with his friend, H.H. Behr, the Academy's curator of Lepidoptera. Edwards later became a trustee and vice-president of the Academy, showing that his scientific activity there was far from sporadic. Boston and New York footlights drew him eastward in 1878-79 and he stayed in New York for ten years, becoming an enthusiastic supporter of the Brooklyn and New York Entomological Societies and editor of Papilio, as well as continuing his successful vocation. In 1889 an opportunity to visit his old "home" in Australia came and he spent a year there as stage manager of an acting company. In 1890 at the age of 60, Edwards returned to New York and although wishing to continue his career, he soon was compelled by poor health to retire to a mountain cottage and died a short time later, on June 9, 1891.

Drama and science may appear to be a surprising mixture, but Edwards was an ardent and energetic enthusiast in both fields. His interest in Lepidoptera appeared early in life, and while in London he started collecting and studying them, under the guidance of Edward Doubleday. His travels provided an opportunity to increase the collection with rare foreign material. At his death his collection, being one of the best in the country, and including his own numerous types as well as many others, was bought by Edwards' friends for the financial benefit of his wife and presented to the American Museum, where it formed the nucleus of their Lepidoptera collection.

Most of his work on this order was on the fauna of the Pacific coast, including descriptions and life histories of both moths and butterflies. While in San Francisco, Edwards enjoyed the friendship of John Muir and the latter sent him many beautiful specimens from the Sierras. Muir wrote him in 1872: "You are now in constant remembrance, because every flying flower is branded with your name." Later, when Edwards had moved to the East, Muir wrote in a letter: "I am glad to see that you are still at work in your delightful studies that keep your heart young and that you have not forgotten me... You are sadly missed in San Francisco." Edwards spent much of his time on the North American Aegeriidae, and many species of that family bear the familiar "Hy.Edw."\* appended to their names. One of his most valuable contributions to the literature was the large "Bibliographical Catalogue of the Described Transformations of North American Lepidoptera" (1889). He was also one of the founders and the first editor, for 3 years, of the short-lived New York journal Papilio, devoted exclusively to Lepidoptera.

Henry Edwards was a man of generous and sympathetic nature and had a host of friends wherever his travels took him. His striking appearance and genuine charm were notable; L. O. Howard wrote of him - "I was immensely impressed by Edwards, tall, handsome, cordial man that he was." This engaging air is captured to a large degree in his book of essays called A Mingled Yarn (1883), mostly sketches of his travels, and which includes such intriguing titles as "Bubbles from Bohemia" and "Mid-Summer High Jinks". Not the least of his attributes was the willing and enthusiastic aid he gave to young students in natural history. The late Dr. William Schaus of the National Museum was one of the students who got his start and encouragement from Edwards. Even the above fine portrait (from Ent. News II: pl.6, 1891) cannot do justice to the respected and loved personality of this man, one of the most colorful of American Lepidopterists.

J.E.R.

\*Not to be confused with "Edw.", the notation for William Henry Edwards, the great butterfly student, who, though a contemporary of Henry, was not related to him. (See NEWS I:8, 1947).



## RECENT LITERATURE ON LEPIDOPTERA

Under this heading are listed each month recent papers from all the scientific journals, from any parts of the world, which are accessible to us through the library of the Museum of Comparative Zoology at Harvard University. Members in countries outside North America are urged to send us references of Lepidoptera papers from journals unavailable to us. Reprints from all members are solicited. Papers devoted entirely to economic aspects, such as insecticides or accounts of damage to human property, will be omitted.

1. Avinoff, A. & N. Shoumatoff, "An Annotated List of the Butterflies of Jamaica." Ann. Carnegie Museum, vol. 30: pp. 263-295, pl. I. 13 Dec. 1946. Gives annotated list of 115 species of butterflies taken by the authors from 1931 to 1940. Abundant and useful distribution records, but nothing on life history. Another noticeable omission is a list of references used. And it is with regret that we note another aberration named, although the large number of records of it (Lerodea tripuncta ab. sinepuncta) removes it from the usual concept of an aberration. It is interesting to note that the fabled "rarity", Papilio homerus, was found in fair numbers and "is easy to catch." This is another of the series of valuable papers by the authors, Bates, Comstock, Huntington, Carpenter & Lewis, and many others, which have appeared in recent years and made the West Indian butterflies so well known.
2. Bourquin, Fernando, "Metamorfosis de Erebus odoratus (Linné) 1758 (Lep. Het. Noctuidae)." (In Spanish). Acta Zool. Lilloana (Argentina), vol. 3: pp. 239-247, 1 fig., 1 pl. 1946 (1947). Describes life history (total cycle 74 days), figures eggs, larva, pupa, adults, host plant (Acacia decurrens var. dealbata). English summary.
3. Bourquin, Fernando, "Metamorfosis de Aglossa caprealis (Hübner) 1800 (Lep. Het. Pyralidae)." (In Spanish). Acta Zool. Lilloana (Argentina), vol. 3: pp. 249-252, 2 figs., 1 pl. 1946 (1947). Describes life history, gives host plant, figures adults, eggs, larval skin, and pupa. English summary.
4. Bourquin, Fernando, "Metamorfosis de Androcharta rubricincta (Burmeister) 1878 (Lep. Enchromiidae)." (In Spanish). Acta Zool. Lilloana (Argentina), vol. 3, pp. 257-262, 3 figs., 1 pl. 1946 (1947). Describes life history, figures eggs, larva, pupa, adults, setal pattern. Lettuce used to feed larvae. English summary.
5. Bruner, S.C., "Notas sobre mariposas diurnas miscelánea de Cuba (Lepidoptera: Rhopalocera)." (In Spanish). Mem. Soc. Cubana Hist. Nat., vol. 19: pp. 25-28. 20 July 1947. Notes on Eurema nise & boisduvaliana, Euptoieta claudia, Phyciodes p. phaon, Vanessa atalanta & cardui, Ageronia ferotina diasia & amphinome mexicana, Eunica pusilla fairchildi, & Siderone n. nemesis.
6. Chagnon, Gustave, "Le Papillon Sthenopsis auratus Crt. (famille des Hépiatidés)." (In French). Le Naturaliste Canadien, vol. 74, p. 176. May-June 1947. Records capture of this very rare species near St. Faustin, Quebec, in July, 1946, the first from Quebec since 1910. Also remarks on other Sthenopsis.
7. Clarke, J.F. Gates, "New North American species and new assignments in the genus Chionodes (Lepidoptera: Gelechiidae)." Journ. Wash. Acad. Sci., vol. 37: pp. 243-254, figs. 1-17. 15 July 1947. Assigns Gelechia nigroarabata, G. oclusa, G. permacta to Chionodes. Describes as new and figures male genitalia of: Chionodes asema (Ill. & Pa.), C. iridescens (Wash.), C. johnstoni (Calif.), C. tessa (Calif.), C. acanthocarpae (Tex.), C. canofusella (Tex.), C. bicolor (Calif.), C. petalumensis (Calif.), C. pereyra (Fla.), and C. grandis (Colo.). Figures female genitalia of the 1st four n. spp. and 6th, 8th, and 9th. Types of 4 of n. spp. taken by E.C. Johnston. Some biological notes given.
8. Curtis, W.P., "A List of the Lepidoptera of Dorset. Part II." Trans. Soc. British Ent., vol. 9: pp. 1-134, figs. 1-8. 28 Jan. 1947. Extensive paper for this region. Present part covers "Ocneriidae" (Lymantriidae), Geometridae, Polyplocidae (Thyatiridae), Sphingidae, Notodontidae, Saturniidae. Figures genitalia of Eucestia plagiata & E. efformata. Classification seems unpolished. Repetition of Meyrick's term "phylum" for superfamily unjustified, since this word has a totally different usage universally accepted in Zoological Nomenclature. Of course, modern family endings should be "idae", not "adae".
9. Diakonoff, A., "Case Bearing Lepidoptera I." Trebunia (Java), vol. 19: pp. 75-81, 2 pls. July 1947. Describes as new: Pseudoxia xanthocephala (E. Java), genus Ceratonetha, and C. chrysocrypta (E. Java). Describes and figures also cases of these and 3 other spp.
10. Dickson, C.G.C., "Pairing of Dira clytus L. with D. mintha Geyer (Lep.: Satyridae)." Journ. Ent. Soc. S. Africa, vol. 10: p. 126. 30 Aug. 1947. Male clytus and female mintha copulating. Female laid eggs, but all larvae died in first instar. Female may have mated with own species previously.
11. Dickson, C.G.C., "Recently Observed Food-plants of some Cape Lepidopterous larvae." Journ. Ent. Soc. S. Africa, vol. 10: pp. 126-130. 30 Aug. 1947. Gives host plants and notes of 40 spp.
12. Dimic, A., "Effetto delle basse temperature invernali sulle crisalidi della Pieris brassicae L." (In Italian). Riv. di Biol., vol. 38: pp. 171-190. 1946.
13. Gourlay, E.S., "Erechthias fulguritella Walk. (Lepidoptera) Inhabiting Pine Cones." New Zealand Journ. of Science & Tech., vol. 27: pp. 248-250, 2 figs. Nov. 1945.

## RECENT LITERATURE (cont.)

14. Hayward, Kenneth J., "Hesperioidea argentina XV (Lep. Rhop. Hesp.)." (In Spanish). Acta Zool. Lilloana (Argentina), vol. 3: pp. 215-230. 1946 (1947). Gives first Argentine records for 7 skippers. Synonymizes three of his own spp. Describes females of 3 spp. and male of 1 sp. for first time. Gives notes on other spp. English summary, no figs.
15. Hayward, Kenneth J., "Una especie y forma nuevas de Hespéridos argentinos (Lep. Rhop. Hesp.)." (In Spanish). Acta Zool. Lilloana (Argentina), vol. 3: pp. 253-255, 1 fig. 1946 (1947). Describes as new: Cogia abdul (Misiones, Arg., & Brazil & Paraguay) and "forma" australis (Caranavi, Bolivia) of Diaeus variegatus. Figures male genitalia of former.
16. Hayward, Kenneth J., "Las especies argentinas de los géneros Mylon y Carrhenes (Lep. Hesperidae)." (In Spanish). Acta Zool. Lilloana (Argentina), vol. 3: pp. 307-312, 2 pls. 1946 (1947). Describes as new C. lilloi (Macas, Ecuador-F.M. Brown & Argentina) and discusses C. canescens. Gives key and notes to 4 Argentine Mylon (melander, jason, pulcherius, illineatus). Figures adult of all 6 spp. and male genitalia of all but canescens. English summary.
17. Kaussari, M., "Pectinophora gossypiella." (In Persian). Iran. Dépt. Gén. de la Protect. des Plantes. Lab. Ent. et Phytopath. Appl., No. 3: pp. 12-15. Mar. 1947. French summary.
18. Lepage, H.S., O. Giannotti & A. Orlando, "Combate ao mandrová da mandioca (Erinnys ello (L.))." (In Portuguese). O Biológico (São Paulo), vol. 13: pp. 76-80, 1 pl. 1947.
19. Mathée, J.J., "Phase variation in the lawn caterpillar (Spodoptera abyssinia Guen.)." Journ. Ent. Soc. S. Africa, vol. 10: pp. 16-23. 30 Aug. 1947. Reports changes in larval characters caused by isolation and crowding in rearing.
20. Miner, Floyd D., "Life history of the Diamondback Moth." Journ. Econ. Ent., vol. 40: pp. 581-583, 5 tables. Aug. 1947. Laboratory rearing notes of Plutella maculipennis.
21. Murray, D., "Some unusual forms of genitalia." Ent. Record & Journ. Variation, vol. 59: p. 90. July/Aug. 1947. Matigramma pulverilinea and Zale spp. discussed.
22. Musgrave, A., "Some Butterflies of Australia and the Pacific. The Swallowtails VI." Austr. Mus. Mag., vol. 9: pp. 133-135, 5 photos. 30 Apr. 1947. Concludes series by covering wallacei and macareus groups and genus Cressida, with sev. photos.
23. Shirozu, Takashi, "A Critical study on the zoogeography of Japanese butterflies with special reference to the importance of the West-Chinese elements." (In Japanese). Matsumushi (Japan), vol. 2: pp. 1-8. June 1947. Context unknown to us because of the language barrier.
24. Stempffer, H., "De l'importance en systématique des caractères de l'armure génitale mâle des Lépidoptères." (In French). Revue française de Lépidopterologie, vol. 10: pp. 217-224, pls. VI-VIII. 1 Apr. 1946. A very clear, simple account of the importance of the male genitalia in Lepidoptera taxonomy, with strong emphasis on the Lycaenidae, the family for which Stempffer is perhaps the leading world authority. Illustrated with line drawings of the genitalia of representatives of seven subfamilies of Lycaenidae (Stempffer apparently considers Theclinae, Heodinae, Lampidinae, Everinae, Plebeinae, Glaucopsychinae, and Lycaenopsinae as subfamilies). It would be interesting to know his basis for referring to Lycaena (phlaeas, heteronea, etc.) as Heodes. His viewpoint is significant, so it is of interest to read that Boisduval "was a mediocre entomologist", and a typical criticism of the archaic taxonomy in Seitz' huge book. The paper closes with a list of the 59 species of French Lycaenidae.
25. Torre y Callejas, Salvador L. de la, "Revisión de las Especies Cubanas de la Familia Papilionidae." (In Spanish). Revista del Inst. de Matanzas (Cuba), vol. 1: pp. 22-43, pl. 1-4, text figs. 1-3. June 1947. Lists 13 species, one subsp., no new names proposed. Adds little or nothing to the information contained in Bates' 1935 "Butterflies of Cuba", but as the work is in Spanish it places the information before amateurs to whom no treatment of the Cuban butterflies has been available in their language since 1881 (Gundlach's "Lepidópteros Cubanos"). All Cuban species are illustrated, and a key given. Brief commentary on geographical distribution, life history, description for each species. (H.K.C.)
26. Torre y Callejas, S.L. de la, "Revisión de las especies cubanas del género Danaus, con la adición de dos nuevas subespecies para Cuba (Lepidópteros. Ropalóceros)." (In Spanish). Mem. Soc. Cubana Hist. Nat., vol. 19: pp. 17-24, 2 pls. 20 July 1947. Keys, photos, and notes on the 7 spp. and races of Danaus in Cuba.
27. Travassos, L., "Contribuição ao conhecimento dos Arctiidae. XII. Género Isia Walker, 1856." (In Portuguese). Rev. Brasil. Biol., vol. 7: pp. 181-194, 26 figs. 1947. Not seen by us.
28. Wester, Horace V. & R.A. St. George, "Life History and Control of the Webworm, Homadaula albizziae." Journ. Econ. Ent., vol. 40: pp. 546-553, 3 figs. Aug. 1947. Excellent detailed life history notes (no descriptions). New host record is Honey Locust, Gleditschia triacanthos. In six years this Mimosa pest has spread from Washington well into Virginia and Maryland.

QUESTION & ANSWER COLUMN

Professor W. T. M. Forbes, of Cornell University, has kindly consented to prepare answers to questions submitted by members on any aspect of Lepidoptera study, if extensive library research is not necessary. Questions are to be submitted to the editor of the NEWS.

Q. "Is the true genus Thecla reserved for certain exotic species, or was the name dropped for reasons of priority? Will you give me references for the distinguishing characters of Thecla over Strymon?"

A. There are two questions involved: the nomenclatural one as to what is "typical" Thecla, and the splitters vs. lumpers as to how large a genus ought to be. The traditional "Thecla" included the hairstreaks that had only three radial branches, ilicis, calanus, etc. etc., but one or two very early workers named quercus as the type, a species that has four. So if you are a lumpers and a strict follower of the "Code" and decisions, chrysalus will be our only Thecla, and all the rest must be called something else (perhaps Strymon, but I am not sure). If you are a traditionalist, all but chrysalus and grunus will be Thecla, and chrysalus will fall to Zephyrus, with several Old World species. If you are a splitter and follower of the Code, of course you limit the name Thecla to quercus and a few Old World relatives, and put all our species in several (ten or more) other genera. The splitters have worked out the names to be used in Europe, North Asia and temperate America by this system, but nobody has yet solved the hundreds of South American "Theclas".

Q. "Why are species like battoides, enoptes, rita, etc., included under Philotes? Are they not further removed from sonorensis than they are from acmon?"

A. Again a question of the splitters vs. the lumpers. These are all pretty closely related but are reported to differ in marked genitalic characters. The grouping you quote is, I suppose, from McDunnough's list, and you should consult Dr. James McDunnough, American Museum of Natural History, for his reasons, which I believe have not been published as a whole. Prof. Vladimir Nabokov of Wellesley College is also working on this group, and may have data on the problem from a world point of view. Psyche 51:104 and 52:1-61 gives an idea of his point of view, his "Plebejinae" being that portion of the blues, not even including the coppers. Personally I think that all the blues except heteronea, which is structurally a copper, make just about one good genus, for which the oldest name is Plebeius Linnaeus.

- W.T.M. Forbes

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Please immediately notify the NEWS editor by card when your address is changed.

BOARD OF SPECIALISTS

The purpose of the Board is to strive toward a high standard of accuracy in published papers by providing authoritative identifications of specimens forming the basis of these published papers. The following rules concerning the service were formulated by the Board:

1. No specimens may be sent until the specialist has replied in writing that he is ready to receive them.
2. No specimens will be accepted unless full data (not key numbers) are on each specimen.
3. A series of each species must be spread, mounted on pins; the others may be in papers.
4. Wherever possible, at least 3 prs. should be sent for determination.
5. The specialist may, if he chooses, retain one-half of the first 8 specimens of each species, but not uniques unless by agreement.
6. Return postage should be provided.
7. Specimens must be carefully packed.

NORTH AMERICA:

Pteridae & Boloria ("Brenthis").....A.B. Klots  
Dept. of Biology  
College of City of N.Y.  
New York 10, N.Y.

Satyridae.....C.F. dos Passos  
Washington Corners  
Mendham, N.J.

Speyeria ("Argynnis").....L.P. Grey  
Lincoln, Maine

Theclinae (Hairstreaks & allies)...H.K. Clench  
Lab. of Vertebrate Zool.  
University of Michigan  
Ann Arbor, Mich.

Plebejinae (Blues).....V. Nabokov  
Museum of Comp. Zool.  
Cambridge 38, Mass.

Hesperiidae (Skippers).....A.W. Lindsey  
Denison University  
Granville, Ohio

Phalaenidae & Notodontidae...J.G. Franclemont  
5829 Little Falls Rd.  
Arlington, Va.

Catocalinae & Aegeriidae.....A.E. Brower  
5 Hospital St.  
Augusta, Maine

CENTRAL & SOUTH AMERICA:

Hesperiidae.....E.L. Bell  
150-17 Roosevelt Ave.  
Flushing L.I., N.Y.

WEST INDIES:

Hesperiidae.....E.L. Bell

All other Rhopalocera.....Eugene Munroe  
Institute of Parasitology  
Macdonald College, P.Q., Canada

EUROPE:

All Rhopalocera.....V. Nabokov

## NOTICES BY MEMBERS

Members are invited to contribute any notices to this column. There is no cost for this service. Unless withdrawn sooner by the member, notices will appear 3 consecutive times.

Wanted: papered specimens of ACTIAS LUNA, AUTOMERIS IO, CITHERONIA REGALIS, & EACLES IMPERIALIS for cash or rare Catocala. R.C. Casselberry, 53 Edgemont Rd., Scarsdale, N.Y.

Will purchase MORPHO MENELAUS, RHETENOR, SULKOWSKYI by the hundred lot or whatever quantity available. The Butterfly Store, 77 Madison Ave., New York 10, N.Y.

WISH TO PURCHASE Canadian (esp. Arctic) Boloria & Colias. Dr. A.B. Klots, College of City of New York, New York 10, N.Y.

Large quantities of Philotes sonorensis, Anthocaris sara, Speyeria macaria, Tharsalea arota for exchange for N.Am. Rhopalocera, esp. Theclinae and Hesperidae. Will exchange Speyeria nitocris for S. diana. D.E. Parker, 1033 S. Beacon Ave., Los Angeles 15, Calif.

EAST AFRICAN BUTTERFLIES, for sale or exchange. Want American species, particularly South Am. R.W. Barney, Govt. African School, Kakamega, Kenya, East Africa.

NAMED INDIAN BUTTERFLIES and unnamed moths from districts of Poona, and Dehra-Dun for sale. E. Hug: airmail c/o Mrs. J.Graf, Zeughausstr. 8, Chur, Switzerland, or regular mail: Vaudrevange-Saar, Wilhelmstrasse 3, Terr. Saare, Via Saarlouis, France.

FOR SALE: Insect collection boxes, 9 x 13 x 2 1/2 inches, dovetailed corners, the finest composition pinning bottoms, sanded but not finished, beautiful redwood throughout, hinged, with latches - \$2.10 apiece, \$24 dozen, P.O.B. Beverly Hills. Bio-Metal Associates, P.O.Box 346, Beverly Hills, Calif.

Papered MANITOBA RHOPALOCERA for exchange for tropical Lepidoptera. About 40 species, all with complete data. List available on request. C.S. Quelch, Transcona, Manitoba.

GUADALCANAL & OKINAWA Lepidoptera (esp. Rhopalocera), of almost every native genus, offered in exchange for needed N.American species. T.W.Davies, 9734 Castlewood St., Oakland, Cal.

Wanted: Philotes of N. America for a systematic study, for purchase, examination, or exchange. Rudy Mattoni, Dept. of Entomology, Univ. of Calif., Los Angeles 24, Calif.

Will exchange WASHINGTON LEPID. & Coleoptera for N. American Rhopalocera, esp. Euphydryas & Mitoura. Eu. taylori available in large series. Many fine specimens from Olympic Mts. and Puget Sound Basin. D.P. Frechin, 1504 N. Lafayette, Bremerton, Wash.

Offering a perfect ♂ ERORA LAETA in exchange for Papilio nitra, hollandi, machaon dodi or what have you. Carl Cook, Crailhope, Ky.

## LIVING MATERIAL AVAILABLE

The NEWS will welcome especially notices concerning the exchange or sale of Lepidoptera eggs, larvae, and pupae, hoping to revive the old interest in rearing and to re-emphasize the importance of studying the immature stages. Contributors are urged to include accurate locality data with all material sent.

PUPAE OF PAPILIO ZELICAON and P. PHILENOR HIRSUTA from California, full data, offered in exchange for papered butterflies needed for our collections.

Thomas W. Davies, 9734 Castlewood St.  
William A. Hammer, 5300 Walnut St.  
Oakland, California

Citheronia regalis & Euparthenos nubilis pupae Catocala cara, concupens, & amatrix eggs. Available alive. Herman Wilhelm, Buckingham Road, R. D. 1, Willimantic, Connecticut.

Available until 1st of March- egg masses of Hemileuca juno, foodplant Mesquite and allied species. Desire to exchange eggs or specimens of Ariz. butterflies & moths for the following Hemileucas: maia, lucina latifascia, grotei diana, burnsi, sororius, and oliviae, also would like to get H. nevadensis from Nevada. Desire Papilios of machaon group also. D.L. Bauer, P.O. Box 469, Yuma, Arizona.

DESIRE LIVING PUPAE OF LYCAENIDAE (esp. Theclinae). Offer in exchange papered Calif. spp. Graham Heid, 11745 Hesby St., N.Hollywood, Cal.

What have you to offer in exchange for LIVING PUPAE of Telea polyphemus? R.J. Ford, 3266 Ardmore Ave., South Gate, Calif.

Cocoons of Platysamia euryalis ("rubra"), gloveri, columbia, and Callosamia angulifera and calleta desired. Correspondence invited. Buy, sell, exchange all kinds of saturniids. R.L. Halbert, 444 N. Normandie Ave., Los Angeles 4, Calif.

Special Notice

Wanted for determination, exchange, or purchase: ARCTIIDAE of the Neotropical Region (especially Central America & West Indies), as well as North American ADELOCEPHALIDAE (Sissphingidae).

Correspondence invited.

Prof. Lauro Travassos, Laboratorio de Helminologia, Instituto Oswaldo Cruz, Caixa Postal 926, Rio de Janeiro, D. F., BRAZIL.

## FOR SALE - THE BERRY COLLECTION

The results of 18 years in Florida of collecting and exchanging. Many very rare species. 2000-4000 mounted specimens; 6000-8000 specimens in papers. Over 1100 different named forms. Especially rich in Hesperidae, Lycaenidae, Sphingidae, Catocala. For details write: Dean F. Berry, Box 146, Orlando, Florida.

## NEW MEMBERS

- Albrecht, Paul, Friedrichstrasse 108, Berlin, Rummelsburg, GERMANY.
- Banks, Leslie, 900 Gunnison St., Chicago 40, Ill.
- Bourgogne, Jean, Laboratoire d'Entomologie, 45 bis, rue de Buffon, Paris(5<sup>e</sup>), FRANCE.
- Bourquin, Fernando, Conde 1639, Buenos Aires, ARGENTINA.
- Breedlove, Richard W., 3677 Highland Ave., San Diego 5, Calif.
- Bryk, Felix, Naturhistoriska Riksmuseum, Entomologiska Avdelningen, Stockholm 50, SWEDEN.
- Carpenter, Prof. G.D. Hale, Dept. of Entomology, University Museum, Oxford, ENGLAND.
- d'Almeida, R.F., Museu Nacional, Quinta da Boa Vista, Rio de Janeiro, D.F. BRASIL.
- Dickerson, Ronald, Atascadero, Calif.
- Evans, Brigadier W.H., Dept. of Entomology, British Museum (Nat. Hist.), Cromwell Rd., London S.W. 7, ENGLAND.
- Farquhar, Dr. D.W., 296 Ames St., Lawrence, Mass.
- Gunter, Peter, Highgate P.O., St. Mary, Jamaica, B.W.I.
- Hackman, Fil. mag. Walter, Parkgatan 9B, Helsingfors, FINLAND.
- Halbert, Richard L., 444 N. Normandie Ave., Los Angeles 4, Calif.
- Hayward, Kenneth J., Instituto Miguel Lillo, Tucumán, ARGENTINA.
- Heley, R.G., "Lygoes", Burcott, Wing, Leighton Buzzard, Beds., ENGLAND.
- Hemming, Francis, 83 Fellows Rd. (Garden Flat), London N.W. 3, ENGLAND.
- Henne, Christopher, 694 S. Grand Ave., Pasadena, Calif.
- Herbulot, C., 31, avenue d'Eylau, Paris (16<sup>e</sup>), FRANCE.
- Hsiao, Dr. T.Y., Biology Dept., National Nankai University, Tientsin, CHINA.
- Jinsheng, Mr. Lu, Institutum Entomologicum Choui, Chang-Chia-Kang, Shensi, CHINA.
- Johnston, Edward C., 2268 E. 60th St., Seattle 5, Wash.
- Kinch, E.M., 168 Parkside Dr. E., Ft. Worth, Tex.
- Kiriakoff, S.G., Université de Gand, 14 Universiteits Straat, Ghent, BELGIUM.
- Le Charles, L. G., 22, avenue des Gobelins, Paris (5<sup>e</sup>), FRANCE.
- Le Marchand, W., 125, rue de Rome, Paris(17<sup>e</sup>), FRANCE.
- Lewis, C. Bernard, Curator, The Institute of Jamaica, Science Museum, Kingston, Jamaica, B.W.I.
- Lichy, Rene, 5 Parque Sanabria, Caracas, VENEZUELA.
- Merker, C.G., 1520 Cooper St., Pittsburgh 12, Pa.
- Oiticica Filho, Dr. Jose, Rua Alfredo Chaves 59, Rio de Janeiro, BRASIL.
- Perkins, Miss Lily, Claremont, St. Ann's, Jamaica, B.W.I.
- Royal Entomological Society of London, 41 Queens Gate, South Kensington, S.W. 7, ENGLAND.
- Rutkowski, Frank E., St. Bede College, Peru, Ill.
- Sellers, Miss Martha, 315 Probart St., Brevard, N.C.
- Smartt, John B., 36 Botanic Road, Glasnevin, Dublin, IRELAND.
- Sternitzky, R.F., 1773 Third St., Napa, Calif.
- Tams, W.H.T., Dept. of Entomology, British Museum (Nat. Hist.), Cromwell Rd., London S.W. 7, ENGLAND.

- Thomas, George W., 107 Whitten Hall, University of Missouri, Columbia, Mo.
- Travassos, Prof. Lauro, Instituto Oswaldo Cruz, Lab. de Helmitologia, Caixa Postal 926, Rio de Janeiro, D.F. BRASIL.
- Turner, A. Jefferis, Dauphin Terr., Brisbane, Queensland, AUSTRALIA.
- Varin, G., 4, avenue de Joinville, Joinville-le-Pont (Seine), FRANCE.
- Verity, Dr. Roger, Caldina, Firenze, ITALY.
- Viette, P., Laboratoire d'Entomologie, 45 bis, rue de Buffon, Paris (5<sup>e</sup>), FRANCE.
- Warren, B.C.S., 3, Augusta Mansions, Folkestone, Kent, ENGLAND.
- Williams, Dr. C.B., Rothamstead Exp. Station, Harpenden, Herts., ENGLAND.
- Zerkowitz, Albert, 127 West 79th St., New York 24, N.Y.

(CHANGE OF ADDRESS) Schoenherr, William H., P.O. Box 673, Danville, Illinois.

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## IMPORTANT NOTICE

This number is being mailed to all members, either 1947 or 1948. However, no further numbers will be sent to members until their 1948 dues of \$1.50 have been paid.

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A recent number of The Coleopterists' Bulletin reports that insect pins of superior quality are now available from Europe. "The address of the company is as follows: YRAN, Diouha 14, Praha 1, Czechoslovakia. They cost \$2.60 a thousand, plus shipping cost, plus duty, which brings the price up to about \$4.00 a thousand. It takes about 2 or 3 months for delivery." If several persons cooperate on a combined order, shipping costs will be lower.

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We have just been informed that a severe earthquake destroyed the home and whole town of Pedro Paprzycki. Mr. Paprzycki is a well-known commercial collector of Peruvian butterflies whose prices are reasonable. Several Lep. Soc. members endorse him as dependable. We are presenting this notice because he is in serious financial straits as a result of the disaster and the purchase of specimens from him now will be of special help. His new address is: Lima, Monzon 162, PERU. The airmail rate is 10¢ per 1/2 ounce.

THE LEPIDOPTERISTS' NEWS is the monthly newsletter of The Lepidopterists' Society. Membership is open to anyone interested in the study of butterflies & moths. The 1948 dues, including subscription to the NEWS, are \$1.50 for Regular Members and \$3.00 or more for Sustaining Members. Please make remittances payable to: Charles L. Remington. Address all Society correspondence to: P.O. Box 104, Cambridge 38, Mass., U.S.A.