

THE SUN SETS AFTER IT IS DOWN

Since the virtual wave-length of a given radiation of celestial origin and, therefore, the value of its astronomical refraction is modified by the rotation of the earth, as are also certain scintillation phenomena, it follows that the above paradox is not identical with the one just explained. Nevertheless, as the spectra of the stars and other celestial objects all overreach the visible portion at each end it follows that the Doppler effect produces no appreciable alteration in the ensemble of the light from any one—merely a minute shift of its entire spectrum that can be detected only in the positions of definite lines.

But even this displacement of the spectral lines, due to the rotation of the earth, is far too small, roughly one three-hundredth the distance between the sodium D's, to affect detectably astronomical refraction. Hence as the sun, the moon, and the stars all rise before they are up, so too they must all set only after they have gone down.

ENTOMOLOGY.—*The generic name Ceropales Latreille (Hymenoptera).* S. A. ROHWER, Bureau of Entomology.

In 1915 Morice and Durrant (Trans. Ent. Soc. Lond., 1914, pp. 403, 406) synonymize the generic name *Ceropales* Latreille with the name *Arpactus* Jurine and propose an entirely new name for those interesting Psammocharid wasps which for more than a century have been known to students under the name *Ceropales*. This is only one of a number of most disconcerting nomenclatorial changes suggested by these authors because of their study of a discarded book review by Panzer. While the present author is of the opinion that from the nomenclatorial standpoint there is no way to disregard the Erlangen List, for it is under this name that the Panzerian book review is now commonly known, he does not believe that all of the changes suggested by Morice and Durrant are in accord with the various rules and opinions of the International Commission on Zoological Nomenclature. Since the receipt of the paper by Morice and

Durrant the writer has spent considerable time investigating the question and collecting the opinions of the various workers on Hymenoptera and has completed a statement of the case for presentation to the International Commission. In the meantime, and until it is possible to receive an opinion from the Commission, he has refrained from adopting any of the changes. The question presented by the genus *Ceropales* need not, however, wait for this decision as it is largely a zoological problem which is satisfactorily covered by existing rules and opinions. Furthermore certain new names have been used for species of this genus, and it seems desirable to review the case with the hope that by so doing unnecessary confusion will be avoided.

The answer rests largely on the principle of accepting genera for which the included species are not mentioned by name, but also partly on the principle of genotype selection for such genera. In regards to the first point if the codified rules on Zoological Nomenclature do not satisfactorily cover the point of accepting the generic names proposed by Latreille in 1796, (Prec. Car. Ins.) opinion 46 is very definite, and it seems to the author that the question answered under this opinion is entirely analogous to Latreille's work of 1796. In regard to the validity of the genera proposed in this work the writer believes that according to the International Code they are valid and must date from 1796, and that the type species must be chosen in accordance with the conditions specified in opinion 46.

Accepting the validity of the name *Ceropales* in the 1796 publication we still have the question of its genotype. If Morice and Durrant are correct the name would have to be transferred from the Psammocharid wasps to the Sphecoid wasps. But even here it seems to the writer they have not used the correct interpretation of opinion 46 or adhered to all the principles of genotype selection covered by the Code. The Code specifically says, "The meaning of the expression 'select a type' is to be rigidly construed. Mention of a species as an illustration or example of a genus does not constitute a selection of a type." Since it is as an example that Latreille referred a species to the genus *Ceropales* in 1802 he did not designate its type. Addi-

tional discussion of this point is, however, not necessary for this particular case because the species referred to *Ceropales* in 1802 cannot be the genotype in accordance with opinion 46. Briefly reviewed the case is as follows.

In 1796 Latreille described the genus *Ceropales* but assigned no species to it. The description he gave, while rather general and applying in most points equally well to certain genera in the families Psammocharidae and Sphegidae, has two characters (viz. the semi-circular labrum and long hind legs) which as far as the groups concerned are involved, apply only to the genus belonging to the Psammocharidae. In 1802 (Hist. Nat. Crust. Ins., 3: p. 339) Latreille again characterizes the genus *Ceropales* and this time cites the species *quinguencinctus* Fabricius and doubtfully "*campestris* ? F." It would appear thus far that *quinguencinctus* would have to be the type of *Ceropales*, but this species does not agree with the original description in the following characters: "Levre superieure demi-circulaire" and "Pattes posterieures longues dans quelques especes." Since *quinguencinctus* does not agree with the description it cannot be the genotype (opinion 46 says, "the genus contains all of the species of the world which come under the generic description as originally published") and in fact Latreille corrected his error in 1804 (Nouv. Dict. Nat. Hist., p. 180) and 1805 (Hist. Nat. Crust. Ins., 13: p. 283) and placing *quinguencinctus* in a new genus, *Gorytes*, and citing *maculata* Fabricius as an example of *Ceropales*. Added proof that Latreille desired in 1804 to correct the error of 1802 is found in the fact that in 1804 *Ceropales* and *Gorytes* are the only genera to which species are assigned. The species *maculata* agrees with the original generic description of *Ceropales* and could correctly be named as the type of the genus. This is exactly what Latreille did in 1810 (Cons. Gen. Crust. Ins., p. 437).

It is almost certain and partly confirmed by Latreille's remarks in 1802 (Hist. Nat. Crust. Ins., 3: p. 335) that as characterized and understood in 1796 the genus *Ceropales* contained species now placed in *Ceropales* and also species now referred to the genus *Gorytes* (*s. l.*) but inasmuch as the characte

of the description all apply to *Ceropales* (as now understood) and not to *Gorytes*, and because it is certain that Latreille intended the name for the groups of Psammocharid wasps it does not seem desirable or justifiable to go against the rules and opinions governing zoological nomenclature and change the interpretation of a name which has had standing for more than two generations. The following synonymy seems to the author to be correct:

Ceropales Latreille, 1796. Type.—*Evania maculata* Fabricius.

Agenioxenus Ashmead, 1902. Type.—(*Ceropales rufiventris* Walsh) *Ceropales robertsoni* Cresson.

Ceratopales Schulz, 1906 (an emendation which is accepted by Banks, *Bul. Mus. Comp. Zool.*, 63: 1819, p. 248).

Hypsiceraeus Morice and Durrant, 1915. Type.—*Evania maculata* Fabricius.

Because of the controversy between Viereck and Ashmead (see *Ent. N.*, 13: p. 275 and p. 318, 1902) concerning the generic name *Agenioxenus* a few words of explanation are necessary. In proposing the generic name *Agenioxenus* Ashmead definitely cited as the type *Ceropales rufiventris* Walsh. This species has been correctly synonymized with *Ceropales robertsoni* Cresson by Fox (*Trans. Amer. Ent. Soc.*, 19: p. 57, 1892) and is a true *Ceropales*. The genus *Agenioxenus* is, therefore, a synonym of *Ceropales*. It so happens, however, that the probable specimen on which Ashmead founded his genus is a male of the variable *Batazonus interruptus* (Say.). Ashmead's statement that the specimen he had was probably a cotype of *C. rufiventris* is undoubtedly wrong as the specimen will not agree with the original description and bears only a name label in Ashmead's hand writing and the printed label "Through C. V. Riley." This case is covered by opinion 65.

RADIOTELEGRAPHY.—*Notes on beat reception.* L. W. AUSTIN and W. F. GRIMES, U. S. Naval Radio Research Laboratory.

Effect of Regeneration.—According to some authorities, the great sensitiveness of the oscillating tube is mostly due to its