

According to procedure, one year's notice is hereby published "making it possible for zoologists, particularly specialists in the group in question, to present arguments for or against the suspension under consideration".

Note A.—Suspend rules. Note B.—Insert in Official List with the type as given in parentheses.

COELENTERATA.—*Monograptus* Geinitz, 1852 (*priondon*); A. B. *Retiolites* Barrande, 1850 (*geinitzianus*); A. B. *Graptolithus* Linn., 1768, to be suppressed; A.

ECHINODERMATA.—*Luidia* Forbes, 1839 (*fragilissima*); A, B.

NEMATODA.—*Anguina* Scopoli, 1777 (*Vibrio tritici*), to be suppressed; A.

CRUSTACEA.—*Squilla* Fabricius, 1787 (*mantis*); A, B.

INSECTA.—The so-called "Erlangen List" of 1801 to be suppressed.

ORTHOPTERA.—*Locusta* Linn., 1758 (*Gryllus Locusta migratorius* Linn., 1758); *Phaneroptera* Serville, 1831 (*Gryllus falcatus* Poda, 1761); A, B.

HYMENOPTERA.—*Cimex* Olivier, 1790 (*Tenthredo lutea* Linn., 1758); A, B. *Crabro* Fabricius, 1775 (*Sphex cribraria* Linn., 1767); A, B. *Lasius* Fabricius, 1805 (*Formica nigra* Linn., 1758); A, B. *Anthophora* Latreille, 1803 (*Apis pilipes* Fabr., 1775); A, B. *Ichneumon* Linn., 1758 (*Ichneumon extensorius* Linn., 1758); A, B. *Pimpla* Fabr., 1804 (*Ichneumon instigator* Fabr., 1793); A, B. *Ephialtes* Gravenhorst, 1829 (*Ichneumon manifestator* Linn., 1758); A, B. *Bracon* Fabr., 1805 (*Bracon minutator* Fabr., 1798); A, B. *Pompilus* Fabr., 1798 (*Pompilus pulcher* Fabr., 1798); A, B. *Bethylus* Latreille, 1802 (*Omalus fuscicornis* Jurine, 1807); A, B. *Prosopis* Jurine, 1807 (*Sphex signator* Panzer, [1798]); A, B. *Ceraphron* Jurine, 1807 (*Ceraphron sulcatus* Jurine, 1807); A, B. *Torymus* Dalman, 1820 (*Ichneumon bedeguaris* Linn., 1758); A, B. *Proctotrupes* Latreille, 1796 (*Proctotrupes brevipennis* Latreille, 1802); A, B. *Sphex* Linn., 1758 (*Sphex flavipennis* Fabr., 1793); A, B. *Ammophila* Kirby, 1798 (*Sphex sabulosa* Linn., 1758); A, B.

LEPIDOPTERA.—In interpreting the generic names assigned by Freyer in his "Neuere Beiträge zur Schmetterlingskunde" to the species there described, each species is to be regarded as having been described by Freyer as belonging to the genus cited by him at the head of each description and not to the genus with which he actually associated the specific name. For example, Freyer described, under the genus *Hipparchia* Fabricius, a species to which he gave the specific name *eriphyle*, and which he proceeded to name *Papilio eriphyle* Freyer. Freyer is to be deemed to have described this species under the name *Hipparchia eriphyle*, and not under the name *Papilio eriphyle*. A.

Potamis Hübner, *Rusticus* Hübner, and *Mancipium* Hübner to be suppressed in favour of *Morpho* Fabr., *Helicopsis* Fabr., and *Pontia* Fabr.; A.

LEPIDOPTERA (RHOPALOCERA).—*Euploea* Fabr., 1807 (*Papilio corus* Fabr., 1793); A, B. *Satyrus* Latreille, 1810 (*Papilio actaea* Esper, [1780]); A, B. *Argynnis* Fabr., 1807 (*Papilio paphia* Linn., 1758); A, B. *Vanessa* Fabr., 1807 (*Papilio atalanta* Linn., 1758); A, B. *Euthalia* Hübner, [1823] (*Papilio lubentina* Cramer, 1777); A, B. *Nymphidium* Fabr., 1807 (*Papilio caricae* Linn., 1758); A, B. *Colias* Fabr., 1807 (*Papilio hyale* Linn., 1758); A, B.

Species in parentheses are to be declared the types *Lycaeides* Hübner, [1823] (*Papilio argyrognomon* Bergstrasser, 1779); A. *Agriades* Hübner, [1823] (*Papilio glandon* Prunner, 1798); A. *Polyommatus* Latreille, 1804 (*Papilio icarus* Rottemburg, 1775); A. *Euchloë* Hübner, [1823] (*Euchloë ausonia* Hübner, var. *erperi* Kirby, 1871). *Princeps* Hübner, [1807] and *Orpheides* Hübner, [1823] (*Papilio demodocus* Esper, 1798). *Carcharodus* Hübner, [1823] and *Spilothyrus* Duponchel, 1835 (*Papilio fritillarius* Poda, 1761); A.

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Effect of Oxygen on the Auroral Afterglow

DURING the past year, I have been studying the effect of oxygen on the auroral afterglow in nitrogen. This afterglow is the one the spectrum of which corresponds to the nitrogen part of the auroral spectrum. Attention has been directed elsewhere¹ to some of the more general results of these experiments, but in view of the recent communication by Vegard and Tønsberg² on the difference between the spectra of sunlit and ordinary auroras, one aspect of my experiments seems worth special mention here.

Oxygen is introduced into the tube until the blue-green afterglow with continuous spectrum appears. As the tube is allowed to run, the oxygen slowly disappears and the spectrum of the afterglow undergoes some striking changes. The stage of the afterglow which follows the initial blue-green continuous stage is one in which the glow consists of a blue-green background that fills the entire bulb, possesses a banded spectrum and lasts about ten seconds. Superposed on this blue-green glow is an orange-red flash of shorter duration and greater intensity than the background glow. This flash is confined to the centre of the bulb, and its spectrum consists of first-positive bands of N₂ and some relatively weak first-negative bands.

Visual examination as well as photographic reproduction of the spectrum shows that the effect of the oxygen is to enhance the first-positive bands relative to the first-negative group. This phenomenon agrees very well with the results of Vegard and Tønsberg on sunlit auroras. The blue-green continuous glow is generally regarded as resulting from the reaction between ozone and nitric oxide. There is therefore probably some ozone present in the orange-red flash stage that follows when the oxygen concentration is slightly reduced.

It is of interest to note that the green auroral line is weaker in this stage of the glow than one would expect, and this also is in agreement with Vegard and Tønsberg's results. It is believed that further study of this orange-red flash will reveal detailed agreement between the laboratory phenomenon here described and the sunlit auroras.

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¹ Kaplan, *Trans. Amer. Geophys. Union*, April, 1936.
² Vegard and Tønsberg, *NATURE*, 137, 778 (1936).