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ON CERTAIN SPECIES OF SATYRUS.

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1. NEPHELE.-Kirby, Faun. Bor. Amer., 1837, described this species as follows : "Wings brown ; primaries both above and below with a paler submarginal broad band including two eyelets; the upper ones surrounded by a paler atmosphere, with a black iris and white pupil; on the under side the atmosphere of the eyelets is most distinct and forms a kind of glory round them," etc. Nothing is said of the sex, but apparently this is the description of a female. The wings of the male are blackish-brown, usually of uniform shade throughout-that is, in the typical male, corresponding to the female of Kirby. But there is a frequent departure from this type in the direction of Alope, the "pale atmosphere" about the ocelli appearing in the male, and in both sexes gradually widening and becoming less obscure till it culminates in a clear yellow band. When this is reached we have Alope, Fabr. So that Nephele intergrades completely with Alope. But this is not everywhere and always. The metropolis of the typical Nephele is in Canada and northern New England, that of Alope in the States south of New York. There is a line running about with the southern boundary of New York, or it may be, in Pennsylvania, below which Alope holds sole possession, and no tendency is discoverable towards Nephele. In the extreme northern area, if there is any departure from typical Nephele, it is the exception, not the rule.

Mr. Scudder, in his essay on The Distribution of Insects in New Hampshire, 1874, says of *Alope*: "This insect is tolerably abundant, sometimes very common, in the southern half of New England. The most northern localities . . . are Norway, Me., Thornton and Shelburne, N. H., and Sudbury, Vt." Thornton is just south of the White Mountains, and Shelburne is close by the mountains on the northcast. Of *Nephele* he says: "It is foun dover the whole northern half of N. E. in great abundance. The only locality in which I have met with it is in Massachusetts, in the elevated region about Williamstown," &c.

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