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NOTES ON GRAPTA INTER'LOGATIONIS, FABR.

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This species was unusually abundant in this, as in many other localities, during the season of 1896, and afforded an excellent opportunity for studying it, which we took advantage of by rearing it from the egg. The preparatory stages are well known, and a full account of the life history was given by Mr. W. H. Edwards in CAN. ENT. XIV., pp. 201-207. As noted by Mr. Edwards, the larvæ vary greatly, and this is true even in those raised from the same batch of eggs, and these variations seem to be in no way connected with the two forms of the imago.

In Mr. Caulfield's List of Diurnal Lepidoptera of the Island of Montreal, published in the CAN. ENT. in 1875, this species is called "rare," and its seasons are stated to be "May (hibernated); July to October."

The question as to the number of broods in the season is an interesting one and requires careful examination, but the majority of the authorities are not very clear upon this subject.

Dr. J. G. Morris made no attempt in his "Synopsis" to deal with seasons or broods.

Dr. Harris is not very clear, as he says that the butterfly "first appears in May and again in August and September," and that "the caterpillars come to their full growth in the latter part of August." From these statements it would seem as if he only recognized one annual brood, the individuals of which hibernated and appeared again in the spring; but he says further that "there is probably an early brood of caterpillars in June or July," though he had not seen any on the hop vines before August, but from his remarks on the duration of the pupa stage, viz., "the chrysalis state usually lasts from eleven to fourteen days, but the later broods are more tardy in their transformations, the butterfly sometimes not appearing in less than 26 days after the change to the chrysalis," would seem to indicate that he recognized more than two broods.