

the Red Deer River locality—now known by the name of an adjacent post office, Dorothy—on July 23rd, 1907, which I have compared with both types in Smith's collection. In that collection also are a pair from Bozeman, Montana, Aug., 1908, and a female from Westbourne, Man., Aug. 3rd, 1908, from Mr. J. B. Wallis. Sir George Hampson gives figures from coloured drawings sent him of both types. That of *flavistriga* is most like my specimen, but shorter winged. That of *extensa* is in accordance with my notes on that type, which is browner than any of the rest I have seen, though when I saw it it was greasy and probably discoloured.

600. *Hadena castanea* Grt.—This name stands wrongly in our lists as a synonym of *pluviosa*. The type of the latter is in the British Museum and is a very badly worn specimen from Vancouver Island. It is, as Hampson lists it, the species well known as *arctica* Bdv., which I believe was described from Labrador. A type of *castanea* is in the British Museum from California, and, according to Smith's Catalogue, there is another in the Tepper collection. That of *cymosa* from Washington Territory is in the British Museum also, and is the same as the type of *castanea* there, and distinct from *arctica*. *Castanea* is sienna brown, and *cymosa* fuscous brown, whilst the "ab. 1" of Hampson is a variegated form with pale shades in the subterminal area. *Castanea* occurs on Vancouver Island, often apparently in considerable numbers. *Arctica* occurs there also, but less commonly. Whilst I think it improbable that the two are one species, the variegated form of *castanea* sometimes resembles *arctica* so very closely as to make separation a matter of the very greatest difficulty, if not occasionally impossible.

In the Kootenai List Dr. Dyar records under *pluviosa* three specimens from Banff, Alta., July 21st, Aug. 11th and Sept. 10th, 1904, adding: "Apparently distinct from *arctica* Bdv., but very close to it." I did not see the specimens when at Washington, but must assume that he took the variegated form of *castanea*, and therefore so record it. I have not found the species amongst specimens sent me from time to time by Mr. Sanson.

601. *H. loda* Strk., syn. *albiserrata* Sm. Mr. Sanson has taken two males of this species at light at Banff, on Sept. 2nd, 1908, and