

WINTER INSECTS IN BRITISH COLUMBIA.

Diptera: *Cramptonomyia spenceri* Alexander.By. J. K. Jacob
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In my general insect collecting of the last few years I have paid particular attention to those insects occurring at the coast in winter, the season during which all Arthropods are supposed to be in hibernation. I find that the mildness of the coastal weather, at least in the vicinity of Vancouver, permits insects of several orders to be active, especially Diptera but also a few beetles, leaf-hoppers, psyllids and on one occasion two Hemerobiids.

This note, however, is concerned with the rare fly *Cramptonomyia spenceri* Alex., described in the bulletin of the Brooklyn Entomological Society, February, 1931, from specimens taken at Vancouver in 1930 and forwarded to Dr. C. P. Alexander by Prof. Spencer. This fly has proved of great interest to Dipterologists and it seems timely to add the known records of its capture. Since the first specimens were caught, additional ones were sent in a collection of Tipulids to Alexander, including some captured by K. Graham in Langley Prairie. All of these were females caught in March. My records of capture are from the University campus, February 1934, generally before noon when frost was on the ground. These captures were made along paths of the University forest. The flies were probably disturbed by my approach and were collected on the wing, the flight strongly resembling Tipulids, for which I at first took them. My specimens were all males. Apparently, then, the males emerge about a month before the females.

The latest information on the systematic position of this fly, as supplied me mostly by Dr. C. P. Alexander of the Massachusetts State College, is that they belong to the family *Bibionidae*. He explains that the genus *Cramptonomyia* diverges markedly from *Bibio* and *Dilophus* but there are several other aberrant genera that are invariably assigned to this family that makes it difficult to place *Cramptonomyia* in any group other than the *Bibionidae*. Such genera are *Plecia*, *Hesperinus*, and *Pachyneura*. *Pachyneura* he regards as the closest known ally of *Cramptonomyia*. This genus is found only in the northern Palaearctic region and is apparently not common in collections. Dr. F. W. Edwards of the British Museum is inclined to make an entirely separate family for *Pachyneura* but in the same group would also place the eastern *Axymyia* which is thought by Alexander as being a true Anisopodid. Dr. Crampton, who has made a very detailed study of these

genera, is inclined to believe that **Cramptonomyia** will at some time be made a family all of its own.

According to Alexander, a thorough study of both larval and pupal stages should go far in settling whether this is a true **Bibionid** or an isolated group. Up to the present, none of these stages has been found. The type specimen is in the Canadian National Collection, Ottawa. A single male has been forwarded to Dr. Edwards.

I wish to express my thanks to Dr. C. P. Alexander for explaining the systematic position to me and for his suggestions on the further study of this fly.