

Family CAPNIIDAE

Small brown or blackish nymphs, under 10 mm. in body length. They are true herbivores and largely inhabit the small upland spring brooks. The life cycle is completed in one year. Antennae and cerci are long and slender; second tarsal segment much shorter than first; third tarsal segment at least twice as long as first and second combined. Legs with a sparse fringe of long hairs. Gills absent. Mouth parts similar to those of the Nemouridae. Wing pads when present lie parallel to the body, and the hind are wider than the front ones. In the males, the last abdominal tergite ends in a conical projection, while in the female nymphs it is only slightly produced, and broadly rounded.

Genus CAPNIA Pictet

The nymphs of this genus resemble those of *Allocapnia*, but differ in the shape of the wing pads. The metathoracic wing pads are similar to the mesothoracic ones except that they are a little wider. The anal field of the hind wing pad is narrow and short, only reaching a little beyond the middle of the wing pad. Since the nymph of only one species (*C. vernalis* Newpt.) is known it is impossible to give an adequate description of the genus. *Capnia* is essentially a western genus, eighteen of the nineteen described species being known from the Rocky Mountains and the western states. Of these not a single species has been reared. I have several western nymphs before me but they are not fully mature and cannot be specifically determined. *C. vernalis*, the only species of the genus occurring east of the Rocky Mountains, has been collected in a number of places in New York State, where the adults may be found during March and April. Since *C. vernalis* is a herbivore, it is probably safe to assume that all the species within this genus are herbivorous.

Capnia vernalis Newport

(Plate 10, figs. 159-163; plate 30, fig. 217.)

Length of body up to 7.5 mm.; antennae up to 3.6 mm.; cerci up to 4 mm.

General color brown, becoming darker as the nymphs near maturity.

Head a little wider than pronotum; rather sparsely coated with long hairs; surface quite smooth; hind ocelli about twice as