

outer side of anal loop in hind wings about as long as inner side of triangle 2. *mutata* Hagen.

DD. Abdomen (excl. appendages) less than three and one-half times as long as thorax; a prominent ventral tubercle on seg. 1; superior appendages about seven times as long as their greatest width, inferior subbasal tubercle at one-fourth to one-fifth the length of the appendage; height of superior carina above outer margin, in profile, not less than depth of appendage directly below it, its length distinctly more than one-third that of the appendage; outer side of anal loop in hind wings longer than inner side of triangle 3. *multicolor* Hagen.

BB. Abdominal seg. 1 without a ventral tubercle; segment 10 without a median dorsal tooth; superior appendages without a superior carina, not apically forked, but with an antepical inferior spine, the apices broad and rounded (*cyanea* group).

E. A black line (rarely absent) on the fronto-nasal suture; face pale yellowish; dorsal thoracic bands 1 mm. or less broad, tapering somewhat towards each end, or sometimes suddenly expanded at the extreme posterior end; lateral thoracic bands nearly straight and equal; spots on abdomen blue, of moderate or large size, PD on seg. 9 distinctly more than one-half as long as the dorsum of the segment; lateral carina of seg. 7 in ventral view slightly or not at all sinuate; generally one cell between A₁, at its origin and the anal triangle 4. *palmata* Hagen.