- 26. Lepomis megalotus (Rafinesque). Paw Paw creek; Kentner's creek.
- 27. Lepomis gibbosus (Linnæus). Paw Paw creek.
- 28. Micropterus dolomieu (Lacépède). Eel river; Paw Paw creek.

## PERCID.E.

- 29. Etheostoma pellucidum Baird. Eel river.
- 30. Etheostoma nigrum Rafinesque. Paw Paw creek; Eel river; Kentner's creek.
  - 31. Etheostoma blennioides Rafinesque. Eel river; Paw Paw creek.
  - 32. Etheostoma aspro (Cope and Jordan). Paw Paw creek.
  - 33. Etheostoma flabellare Rafinesque. Eel river.
- 34. Etheostoma coeruleum Storer. Eel river; Paw Paw creek; Kentner's creek.

## COTTID.E.

35. Cottus richardsoni Agassiz. Kentner's creek.

AN ALPHABETICAL AND SYNONYMICAL CATALOGUE OF THE ACRIDIDE OF THE UNITED STATES. By W. S. BLATCHLEY.

Variations in the color-pattern of etheostoma caprodes. By W. J. Moenkhaus.

## [ABSTRACT.]

In examining a representative number of Etheostoma caprodes from localities covering practically all the territory of its distribution. It was found that there existed a great variation in the color-pattern and that this variation showed a definite line of development.

The simplest coloration consisted of alternate long and short vertical bars developed on the body from the head to the base of the caudal. This simplest coloration was the prevailing pattern of the specimens taken from the streams of Indiana. Four specimens from the Alabama river differed only in that the bars were very much broader and more intensely colored.

In the specimens taken from certain tributaries of the Cumberland and

Tennessee rivers there was developed between each of the above long and short bars a still shorter and narrower bar, so that the coloration here consisted of whole, half and quarter bars. The Arkansas river also afforded exact representatives of this pattern.

Between the two patterns described every possible gradation was found. The quarter bars made their first appearance between the fifth and sixth whole bars. The whole bars toward the posterior end of the body increased in width and intensity of color near their ventral limit so as to give rise to an incomplete longitudinal series of lateral spots. These spots were more evident in the pattern consisting of whole, half and quarter bars.

Specimens from Texas showed the bars less regularly developed with a corresponding increase in the extent and distinctness of the series of lateral spots.

A great number of specimens taken from other tributaries of the Cumberland and Tennessee rivers all showed the longitudinal series of nine, almost confluent black lateral spots very highly developed, while the bars had become so modified as to form quite a close network over the dorsal half of the body. The young of this pattern had the spots less strongly developed, and the original bars could be easily traced.

It seems, thus, that the variations in the color patterns in *E. caprodes* are by no means promiscuous, but that they show a serial passage from one form, that consisting of alternate whole and half bars, through the form consisting of whole, half and quarter bars, and having the incomplete longitudinal series of lateral spots more highly developed to the reticulated form having a very prominent longitudinal series of dark lateral spots. I was unable to discover any relation between these variations and the latitude in which they occurred.

Some queries relative to a supposed variety of solanum dulcamara. By R. W. McBride.

The books describe the flower of the common Bitter Sweet, Solanum Dulcamara, as being purple in color. This, as is well known, is the usual color of the flower of this plant. Some six or eight years ago, however, I found in DeKalb county a specimen, which, while it in all other respects