

A Simplified Method for Identifying Experimental Shrimp

A simplified method for the short term marking of experimental shrimps and prawns, has been developed based on the ear-notch system commonly used for domestic swine. At birth pigs' ears are notched according to number and litter; this mark is retained throughout life. With shrimp, the distal edges of the uropods are notched in such a way as to permit rapid visual identification of each animal. Notches in each uropod division are added to obtain animal number (fig. 1). This coding system allows numbering of up to 122 animals without having more than 2 notches per tail section. The method can be applied to twice this number by using a separate series for each sex.

Seventy-nine pink shrimp (*Penaeus marginatus*), ranging in total length from 5.2 to 18.5 centimeters (0.9 to 49.4 grams), were marked by tail notching with small dissecting scissors. Figure 2 illustrates shrimp number 23. The shrimp were restrained by firmly holding each in a cloth towel with only the tail exposed. With little practice, rapid marking was accomplished. Care was taken not to extend each cut more than half way across each division. This prevented undue weakening of the structure.

The shrimp were subsequently held in groups under laboratory conditions and fed experimental rations. Weight, length, molt, and mortality data on individuals were recorded over a 45-day period. Although some closure of the notch occurred, shrimp continued to be readily identified after passing through two successive molts. In addition, newly discarded exoskeletons could be identified as belonging to specific individuals. No adverse effects on the animals were observed when notches were properly cut. It was concluded that under experimental conditions, given certain size limitations, this system could be an effective and practical means of marking individual shrimp without interfering with movement or molting. Recutting notches could conceivably extend recognition as long as is deemed necessary.

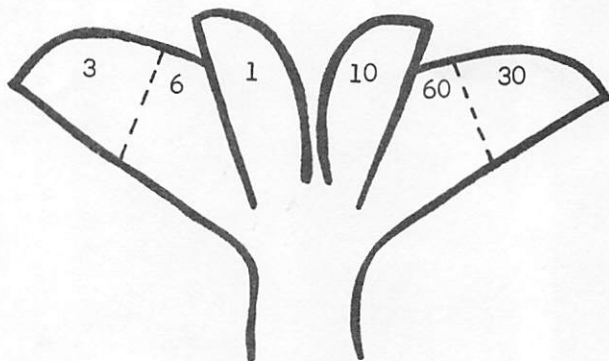


Figure 1.—Dorsal view of uropods with numbers representative of each division.

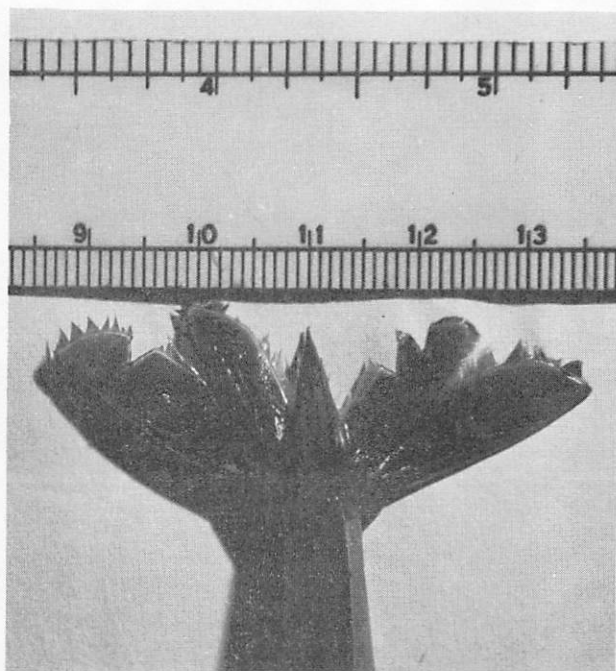


Figure 2.—Dorsal view of uropods notched for number 23.

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