In this study, it was aimed to determine the adaptation capability to controlled conditions, reproductive behaviors, and production of Aphanius mento caught from Kirkgoz Springs, Antalya. Fish material for broodstock were caught using fine mesh tulle net and bag net with 2.5 mm mesh size. Twenty five female and 10 male breeding fish acclimated to experimental conditions in Aquarium Department Unit of Ministry of Food, Agriculture and Livestock Mediterranean Fisheries Research Production and Training Institute were spawned by providing egg collectors to the tank. Aphanius mento eggs were spherical, transparent and sticky. Examination with the microscope revealed that the eggs were full of pale yellow egg yolk with 7-8 lipid droplets and had fibrous sticking filaments on the surface. The average egg diameter was 1.59±0.50 mm (n=8). Hatching were observed at 11th day at 22.5±1.0ºC water temperature whereas at 8th day at 27.0±0.45ºC. Total length of newly hatched larvae was 5.1±0.07 mm, and swimming were competed at 4th day. Average size of one-week larvae was 5.6±0.2 mm. At this stage fins were fully developed, the larvae were able to swim freely and take exogenous food. Mean length of the fish was 2.7±0.2 cm on 7th month and a juvenile fish had an appearance of morphologically mature fish.

Key Words: Cyprinodontidae, Aphanius mento, reproductive characteristics, larval development.