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J Aquac Res Development 2018, Volume 9
DOI: 10.4172/2155-9546-C1-024

On the aquaculture of a plankton crustacean *Polyphemus pediculus* (Cladocera, Onychopohora)

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Polyphemus pediculus (Linnaeus, 1761) is distributed in the plankton of waters of Northern Hemisphere. The crustacean is characterized by a short life cycle, rapid development and reproduction, high degree of aggregation and permanency of its location in the water body. It serves as a main feeding object for young and adult planktivorous fish of the shallows and predatory invertebrates. The crustacean body contains 22% of fat, 52% of protein, 3% of carbohydrates and 8.1% of ash. *P. pediculus* is a promising object for a starter feed in industrial fish farming. Extraordinary plasticity of the crustacean phenotype and its individual development, high intensity of its nutrition and frequent defecation, should be considered when establishing the aquaculture. Use of the main component method in the morphometric studies of the species local population, enabled to ascertain existence of age-dependent and sex-related variability of individuals, which occur in correspondence with the biotopic and seasonal conditions. The species local population represents a totality of reliably different morphometric seasonal races, which succeed each other during the open-water season. The aquaculture starting generation should be represented by newborns, which emerged in the vessel, in which the aquaculture is to be maintained. Crustaceans should be kept under stable conditions of 4 to 5 cm3 of water per a specimen, the temperature of 15 to 18°C, the daylight period length of 10 to 12 hours and permanent presence of green algae and small Cladocera. One third of the aquaculture water should be substituted by a fresh water portion every 7 to 10 days.

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