

Key selections for microalgae, the indispensable live feed in bivalve hatchery: a brief review

ABSTRACT

In the current study, bivalve primarily consumed microalgae were addressed in all their developmental stages. Microalgae, an absolute nutrient source of essential phytonutrients and biologically active compounds, are vital for bivalve growth, health and reproduction. However, in natural habitat, its feeding preferences are not limited to only microalgae, but also include bacterioplankton, microzooplankton, detritus, protist as well as nonnutritive and dissolved organic materials. In contrast, bivalve feeding under controlled hatchery conditions relies on selective microalgae species for broodstock conditioning, larval and post-larval rearing. These activities mainly targeted the high production of seed, also known as spat which depends on the quality and quantity of the microalgae. Thus, thorough preparation and selection of microalgae are critical for the success of hatchery operations. This paper provides a brief overview of the current literature and understanding of microalgae selection criteria as live feed in bivalve hatchery.