

## First feeding strategy for hatchery produced Beluga sturgeon, *Huso huso* larvae

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### Abstract

Co-feeding of fish larvae with live food and formulated diet has been at the focus of fish nutritionists since last decade. In this study we tried to refine the feeding practices of great beluga sturgeon (*Huso huso*) larvae using different combinations of newly hatched *Artemia urmiana* nauplii and trout starter diet. Three replicate groups (250 fish/replicate) of first-feeding *Huso huso* larvae were fed on the basis of four main feeding regimens: (1) live food (live nauplii of brine shrimp *Artemia urmiana*); (2) indirect transition (5 days live food followed by gradual transition to formulated diet); (3) direct transition (using different combinations of live and formulated diet from start feeding); (4) formulated feed (FD). It was found that combining live food and manufactured diets (co-feeding) from first feeding stage (direct transition) significantly improves the weight gain in *H. huso* larvae followed by indirect transition, live food and FD. But survival was significantly higher in larvae fed on pure live food and direct transition regimens compared to indirect transition and FD. It was concluded that co-feeding of *H. huso* could be started immediately from commencement of exogenous feeding.

**Keywords:** *Huso huso*, *Artemia* nauplii, Formulated diet, Co-feeding, Growth, Survival

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