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Title: **Effects on growth and survival of loach (*Misgurnus anguillicaudatus*) larvae when co-fed on live and microparticle diets**

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Abstract: The effectiveness of co-feeding loach (*Misgurnus anguillicaudatus*) larvae with live microparticle diets on weaning performance was described here. Dry weight, total length, length and weight-specific growth rate (SGR) and survivals were monitored at 23-25˚C from the 4th day post hatching (dph) in different diet regimes, which included: microparticle diets (A), live cladocerans (B), enriched cladocerans (C), half microparticle diets plus half live cladocerans (D) and half microparticle diets plus half enriched cladocerans (E). The SGR (L and W) were significantly lower in treatment A than in other treatments after completing metamorphosis (day 4–20, $P<0.05$). On 30 dph, dry weight (mg) a total length (mm) were significantly lower in treatment in A than in other treatments ($P< 0.05$). There were no significant differences in growth in treatments B, C, D and E before 30 dph. However, when live feed was withdrawn from 31-60dph, in metamorphosed fish, there were significant differences ($P<0.05$) among the treatments in survival and growth. Metamorphosed fish in treatment E had higher survival than the fish in other treatments at the end of the experiment. The SGR (L and W) of weaned fish in treatments B and C were similar but lower than in treatments A, D and E respectively. However, dry weight and total length in treatment A were significantly lower than in treatments D and E. It is suggested that weaning of *M. anguillicaudatus* from early development would appear to be feasible and that larval co-feeding improves the growth and the survival.

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