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**A COMPARISON OF LARVAL FEEDS AND THE EFFECT OF SUN LIGHT  
ON THE GROWTH OF GUPPY (*POECILLIA RETICULATA*)**

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Guppy (*Poecillia reticulata*) is the most widely distributed and firmly established aquarium fish in the world. The efficient management practices as well as the balanced larval feeds have a direct effect on the exporting quality.

Three larval feeds were tested for growth and survival of guppy fry. *Artemia salina* eggs were hatched using 28-30 ppt saline water kept at 27 °C for 24 hours. Micro-worms (*Anguillula silusiae*) were cultured on bread and Soya flour mixture. A dry pelleted feed was formulated using intestines of layer chicken, shrimp head meal, tilapia head meal and Soya flour as protein sources. CRD with three replicates was used as the experimental design. Day old guppy fry were introduced to each tank at a stocking density of 64 fry/m<sup>2</sup>. They were fed twice a day at 100g/10,000 fry. Weight gain was measured at 7-Day interval. Water quality parameters were recorded at 4-Day interval through out the experimental period. The effect of sun light on the growth rate, survival and colour development was determined by keeping one treatment exposed to the sunlight while the other unexposed.

Post larvae fed with artemia and micro worms showed significantly higher ( $P<0.05$ ) increase in weight, than larvae fed with formulated feed during the first 14 days. However during the next 42 days, formulated feed fed fish showed significantly higher ( $P<0.05$ ) increase in weight than those in the other two treatments. Hydrogen sulphide, ammonia and ammonium iron concentration did not show a significant difference ( $p>0.05$ ) in the three treatments and the values were within the tolerable range for guppy. Fish exposed to sun light showed significantly higher growth ( $P<0.05$ ), and more attractive colour patterns. Fecundity was found to be directly related to the body weight.

Results revealed that hatched artemia as well as micro-worms could be used as a larval feeds for guppy. After the first 14 days, formulated feed could be used to achieve higher performance. It could be concluded that sun light has a favourable effect on the growth rate development of attractive colour patterns, healthiness as well as fecundity.