

## **Population Growth and Production of Apocyclops dengizicus (Copepoda: Cyclopoida) Fed on Different Diets**

### **ABSTRACT**

This study was carried out to investigate the effects of various diets: 4 monoalgal diets: *Nannochloropsis oculata* (N), *Isochrysis galbana* (I), *Chaetoceros calcitrans* (C), and *Tetraselmis tetraele* (T); 4 mixed algal diets: N+I+C+T(NICT), N+I+C(NIC), C+T(CT), and I+T(IT); and 2 nonalgal diets: baker's yeast (BY) and prepared shrimp feed (SF) on population growth and density of *Apocyclops dengizicus*. The type and density of diet had significant effects on the growth and density of *A. dengizicus* ( $P < 0.01$ ). Of tested diets, T and CT were optimum diets due to higher density and growth rate of *A. dengizicus* compared to other diets. Their high dietary value was related to the higher contents of polyunsaturated fatty acid, particularly docosahexaenoic acid (22:6n-3), eicosapentaenoic acid (20:5n-3), and arachidonic acid (20:4n-6) compared to *A. dengizicus* cultured on other diets. The results of the present study illustrated that *T. tetraele* was the most suitable food for the culture of *A. dengizicus*.

**Keyword:** *Apocyclops dengizicus*