OP-06

Dietary contribution of several algae to the growth of rotifer, Brachinous calyciflorus

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To examine the dietary contribution of algal preys, *Microcystis aeruginosa*, *Chlorella vulgaris* and *Stephanodsicus hantzschii*, to the growth of a rotifer, *Brachionus calyciflorus*, the growth rates, egg holdings and mortalities of animal were investigated. Two algae preys, *M. aeruginosa* and *C. vulgaris*TM, effectively induced the high growth of rotifer population. In the prey density, *C. vulgaris* UTEX26 and *S. hantzschii* were sharply decreased within 2-3 days after food supply, while *M. aeruginosa* and *C. vulgaris*TM slowly decreased. Rotifer fed on *M. aeruginosa* showed lots of lasting egg holdings, and their mortality was lower than any other prey. On the contrary, animal culture with *S. hantzschii*, showed the egg holder in a short period, and the mortality was higher than any other prey. The results suggest that a hepatotoxic cyanobacterium, *M. aeruginosa*, can be applied as a relevant diet for the proliferation of rotifer population.

Key words: Rotifer, Brachionus calyciflorus, algal diets, egg holdings, mortality