

## LIPID CONTENT IN *DAPHNIA* FROM PAMPULHA RESERVOIR (MINAS GERAIS)

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Organisms of zooplankton generally accumulate energy in their biomass as lipids (Goulden & Henry, 1988). Biochemical analyses of marine and freshwater copepods and cladocerans allow us to determinate, for example, starving periods, when the lipid content is reduced (Meyer & Walther, 1988).

*Daphnia* sp. was used in the analyses due to its higher average biomass values considering all other organisms of mesozooplankton. The organisms were collected with a plankton net (mesh size of 90  $\mu\text{m}$ ), preserved in a thermos bottle with a large opening (10cm diameter) containing water from the reservoir, and then transported to the laboratory (30 minutes) where they were filtered with a stainless steel chiffon with 160  $\mu\text{m}$  mesh size and then frozen. Afterwards, they were freeze dried (Edwards L5KR with a pressure of  $10^{-2}$  mbar). The sorting of the organisms was made using a ZEISS stereo microscope. The aliquots had no less than 300  $\mu\text{g}$  of dry weight. The dry weight determination was made through the gravimetric method (Balance Mettler 0,000001g). A colorimetric method (the sulpho-phospho-vanillin reaction, after Zollner & Kirch, 1962) was used for lipid analyses.

The lipid contents in *Daphnia* sp, varied between 10% and 17% of the dry weight, depending of the seasonal stage considered.

Sampling date	Total lipids in <i>Daphnia</i> (% DW)
10 June 1992	13.3 $\pm$ 4.3 (n=6)
06 October 1992	10.0 $\pm$ 3.0 (n=3)
17 March 1993	17.0 $\pm$ 7.0 (n=3)
10 May 1993	14.6 $\pm$ 5.9 (n=4)

This shows that the lipid contents of *Daphnia* exhibited a small, but important and detectable seasonal variation.

### REFERENCES

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