

II. Heat stress in *Triticum*: kinetics of Cu and Zn accumulation

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ABSTRACT

The interactions between high temperatures and Cu/Zn accumulation were investigated in bread and durum wheat. Plants were grown in a greenhouse, at two different temperatures regimes (control - 25/14°C and heat stress - 31/20°C), and the contents and uptake/translocation of Cu and Zn were evaluated during three developmental stages of plant growth (booting, grain filling and maturity). During grain filling and at maturity it was found that root, shoot and spike concentrations of Cu increased in heat stressed plants of the genotypes Golias and Acalou. The same trend was observed for root and shoot concentrations of Zn in both durum wheat genotypes. It was concluded that plants submitted to high temperatures (during the grain filling period) become more efficient in the Cu translocation to the shoots.

Key words: *Triticum aestivum* L. - *Triticum turgidum* subsp. *Durum* - heat stress - uptake - nutrients translocation.