PHYSIOLOGICAL PROCESSES OF *Neonectria ditissima,* CAUSAL AGENT OF EUROPEAN CANKER ON APPLE

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European Canker (*Neonectria ditissima*, anamorph *Cyllindrocarpon heteronema*) has become a major problem for the production of apples (*Malus domestica*) in Brazil, and there are few studies available in the national literature. The objective of this work was to evaluate: i) mycelial growth and sporulation of *N. ditissima* in PDA medium under different temperatures; ii) effect of the temperature and wetness period on conidial germination of *N. ditissima*; iii) susceptibility of the cultivars 'Eva' and 'Gala'. For all isolates tested (n=4) the temperature of 20 °C favored mycelial growth and the lower growth was at 30 °C. The microconidia production was superior to macroconidia in all temperatures. The micro/macroconidia ratio was lower at 10 °C for most of the isolates tested and there was no production of macroconidia at 30 °C. With 12 hours of wetness, the temperature of 25 °C favors the germination of more than 70% of conidia. With 48 hours of wetness, germination was above 90% regardless of the temperature. Wetness of 2 hours is not sufficient for germination of 10% of conidia at any temperature. Cultivars Eva and Gala did not differ in relation to the incubation period, which varied from 16 to 37 days.