

Conidia Production of *Nothopassalora personata* on Media

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In vitro studies with *Nothopassalora personata*, the cause of late leaf spot disease of peanut, have been limited due to slow growth and poor reproducibility of spore production in culture. A study was conducted at Valdosta State University to evaluate the effect of isolate age and morphology on conidial production. Isolates of *N. personata*, originating from single spores transferred from dried late leaf spots in January 2021 and fresh sporulating lesions in October 2021, were cultivated on potato dextrose agar (PDA) at room temperature under continuous light. In both trials, conidia were observed when germlings were 5 to 10 days old, and sporulation ceased shortly thereafter. For all isolates, nonsporulating tissues were uniformly melanized and stromatic with a crust-like texture for 2 to 3 months, after which one or more new morphological forms emerged. The most frequently observed forms presented reddish-brown hyphal fragments, light gray hyphal fragments, and smooth stromata with red pigmentation. All dark brown, reddish-brown and smooth red tissues produced conidia 10 to 14 days after homogenization for isolates less than 5 months old. Across forms, approximately 500 conidia per mm² tissue were produced. Spore production decreased for all forms when isolates were older than 6 months. Homogenization of the light grey stromata failed to produce conidia regardless of isolate age. This study demonstrates that isolate age and morphology are important factors to consider when attempting to induce sporulation of *N. personata* on media. Isolates that are younger than 5 or 6 months old without light gray hyphal fragments are optimal.