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## MORPHOLOGICAL VARIABILITY AND GENETIC DIVERSITY OF FUNGAL ISOLATES ASSOCIATED WITH VASCULAR WILT BABACO (*Vasconcellea heilbornii* var. Pentagona) AT SOUTHERN ECUADOR.

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RESUMEN. The Babaco Vascular Wilt (MVB), caused by Fusarium oxysporum is a disease of great importance due to the severe losses that occur in growing Babaco (Vasconcellea heibornii var. Pentagona). The goal of the research was to study the morphogenetic variability of fungal isolates associated with MVB in southern Ecuador. Samples were collected in the areas of highest crop production, where plants with visible symptoms of the disease were selected. Samples were subsequently processed to obtain pure cultures of the causal agent of the disease. Obtained isolates were characterized morphologically, taking into account: type of mycelium, color of the colony, radial growth, quantification and measurement of reproductive structures (macro and microconidia). The isolates were then subjected to molecular analysis by genomic DNA extraction, amplification and sequencing of ITS subregion. A total of eleven isolates, which showed morphological characteristics indicative of Fusarium were obtained. High morphological variability between them in different collection sites was observed, regarding colony pigmentation, mycelium type and in the abundance of reproductive structures. According to the radial growth, three isolates were identified as with slow growth, five as with average growth and three as with fast growth. The results of molecular analysis demonstrated the existence of Fusarium sp. F. oxysporum and F. oxysporum f. sp. ciceris associated with MVB. Knowledge of the species in this crop pathosystem provides the basis for further studies involving the biocontrol of the disease.