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PROGRAM & ABSTRACTS

Diversity of the *Botryosphaeriaceae* family in Guinea-Bissau (West Africa): the beginning of a tale in cashew

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Cashew (*Anacardium occidentale* L.) production is a major commodity in several tropical countries, mainly in the West Africa region, which accounts for close to 45% of world cashew production. In Guinea-Bissau, cashew is the main source of economic revenue for both government and household levels. Despite its value as a cash crop, cashew orchards are extensively planted with little agronomic management, thus posing a threat for the emergence of fungal diseases. Gummosis and dieback of *Anacardiaceae* plants have long been associated with infection by a complex of cryptic species of *Lasiodiplodia* and other genera of the *Botryosphaeriaceae*, as *Neofusicoccum* spp and more recently *Cophinforma* spp. An exhaustive field disease survey was carried out in several Guinea-Bissau regions and a total of 46 fungal isolates were sampled from cashew infected tissues (i.e. trunk, bark, leaf and apple). To uncover the diversity of *Botryosphaeriaceae* spp. sampled, a phylogenetic analysis by a three-amplicon approach (ITS, TEF1-alpha, β-tubulin) was performed. Preliminary results reveal the detection of three relevant genera, namely *Lasiodiplodia* sp. (n=32, 70%), *Neofusiccocum* sp. (n=12, 26%) and *Cophinforma* sp. (n=2, 4%). Among all taxa, *Lasiodiplodia* spp. was the most widespread across the country. In our study, *Neofusiccocum batangarum* is the most likely present species from the genus in Guinea-Bissau, while for *Lasiodiplodia* at least three species are confirmed: *L. theobromae*, *L. pseudotheobromae* and *L. caatinguensis*. Further analyses are ongoing to robustly assist species identification particularly in *Lasiodiplodia*. Also, the presence of *Cophinforma* spp. as a casual agent of dieback was found, only previously reported for cashew in Brazil. This work represents the first attempt to unveil the diversity of the *Botryosphaeriaceae* taxa associated to the diseases affecting cashew in Guinea-Bissau which is an essential milestone for sustainable production.

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