

ENCONTRO SCIENTIA

April 24

12h00

Room 2.2.14, Ciências ULisboa

Anacardiaceae agroecosystems in Guinea-Bissau: characterization of entomofauna and implications to sustainable production

Cashew (*Anacardium occidentale* L.) and mango (*Mangifera indica* L.) are important Anacardiaceae crops in Guinea-Bissau, yet pests threaten their productivity. This research investigates the dynamics of entomofauna in both agroecosystems by characterizing agricultural production systems, identifying key pests, analyzing their spatial distribution and relation with abiotic factors, and assessing trophic interactions.

Fieldwork across 151 cashew orchards (2021-2023) revealed that most cashew producers are men (40-60 years), managing small plantations (<5 ha) with low nut yields (<0.5 tons/ha). A total of 15 pests were identified, primarily Coleoptera and Hemiptera. About 73% of the pests belonged to the non-reproductive guild, and the remainder were reproductive guild. Cacheu (northern region) recorded the highest overall of pest occurrence. Additionally, Isothermality and maximum temperature had positive influences. The fauna auxiliar were generalist predators and parasitoids. These findings offer valuable insights for developing integrated pest management strategies, promoting sustainable production of Anacardiaceae crops.



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