First report of the bagworm *Oiketicus kirbyi* Guilding, 1827 (Lepidoptera: Psychidae) on *Alpinia purpurata* (Vieill.) K. Schum. (Zingiberales: Zingiberaceae)

Psychidae Boisduval, 1829 (Lepidoptera: Tineoidea), known as bagworms, comprises over 1,350 species (Van Nieukerken et al. 2011), with fifteen species occurring in Brazil (Moreira et al. 2024). These moths build their bags using silk, pieces of leaves, and branches from their host plant, carrying them during the entire larval stage, either males or females (Carneiro et al. 2024), which may be a way to reduce natural enemies' attacks. When adults, most females are apterous and never leave the bag, while the males have fully developed wings and fly in search of females to copulate (Campos-Arce et al. 1987, Carneiro et al. 2024). *Oiketicus kirbyi* Guilding, 1827 (Oiketicinae) is easily found in Brazil where it is known as a pest by infesting crops, and due to this reputation, its peculiar biology had already been explored (Stephens 1962, Campos-Arce et al. 1987, Pereira et al. 2001, Rhainds & Cabrera-La Rosa 2010, Carneiro et al. 2024). There is a report in the State of Alagoas between the association of *O. kirbyi* and an exotic ornamental host plant (Guzzo & Lima 2020), thus it would be time to find this species feeding on another ornamental plant. This paper reports *Alpinia purpurata* (Vieill.) K. Schum. (Zingiberaceae), for the first time, as a host plant to *O. kirbyi*.

In November 2019, a bagworm was found in a Zingiberaceae shrub at the Universidade Federal de Alagoas (UFAL) (-9.55777, -35.77555, 86 m a.s.l.), municipality of Maceió, State of Alagoas, Brazil, and carried out to the Laboratório de Bioecologia de Insetos (LABIN). Afterward, the insect was placed in a cage (Lima & Carvalho 2017) to gather data regarding the emergence of the adult. This adult and its bag were pinned, deposited at the LABIN Entomological Collection at first, and identified by comparing with specimens deposited at the Coleção Padre Jesus Santiago Moure (DZUP) from the Universidade Federal do Paraná (UFPR), municipality of Curitiba, State of Paraná, Brazil. Branches from the host plant were sent to the MAC Herbarium of the Instituto do Meio Ambiente do Estado de Alagoas (IMA-AL), to deposit under a registration number and confirm the species.

The host plant *A. purpurata* was identified and deposited (MAC 65226), and the bag found on the plant was completely closed (Figure 1A), presuming that the larva had stopped feeding and was preparing to turn into pupa. The male emerged through the bottom of the bag (Figure 1B, C, D).

Alpinia purpurata is native from Asia (Kobayashi et al. 2007, Teixeira & Loges 2008), but it is cultivated in the tropics and subtropics, being used extensively as an ornamental plant either for home or commercial sales (Kobayashi et al. 2007). There is a record of an association between *Oiketicus* sp. and *A. purpurata*, but the identity of the bagworm is unknown (Aristizábal et al. 2013). The emergence through the bottom of the bag was also reported by Campos-Arce et al. (1987).

The voracious *O. kirbyi* is considered polyphagous, and it is responsible for causing damage to several ornamental plants, forests, and crops (Campos-Arce et al. 1987) — predominantly in woody plants —, becoming worse as long as the larvae grow, feeding during the day and at the night (Stephens 1962), being recorded around 40 botanical families as host plants as compiled by Guzzo & Lima (2020). This paper brings the herbaceous plant *A. purpurata* as a new host plant to *O. kirbyi*.

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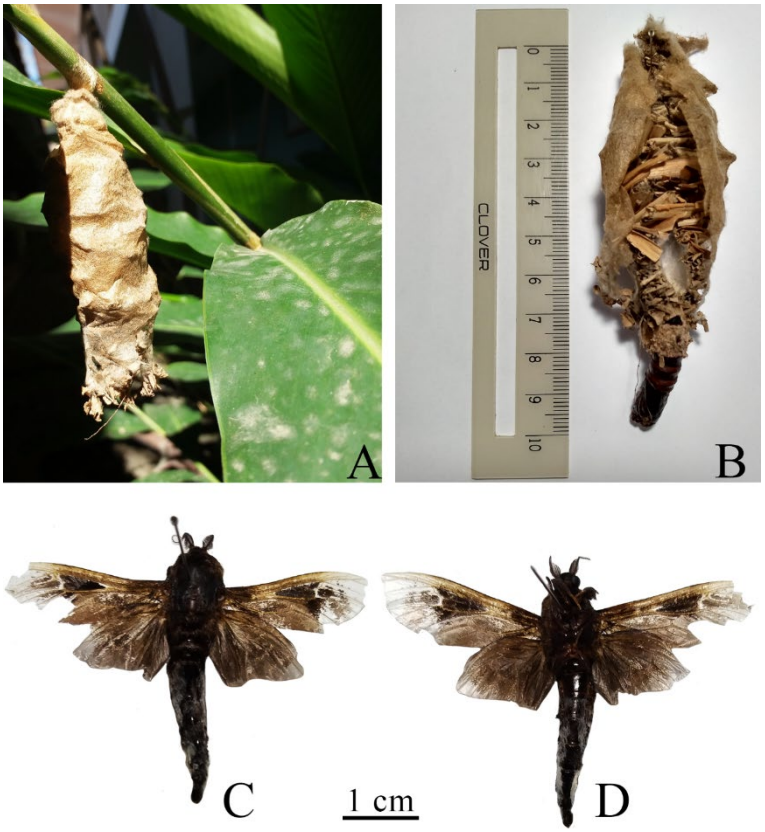

Figure 1. (A) The bagworm *Oiketicus kirbyi* Guilding, 1827 (Lepidoptera: Psychidae) found on *Alpinia purpurata* (Vieill.) K. Schum. (Zingiberaceae); (B) The male bag; Male adult (C) dorsal, (D) ventral views.

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