Abstract

Lepidoptera species were monitored in a plantation of Eucalyptus grandis in the Municipality of Bom Despacho, State of Minas Gerais, Brazil from March 1987 to February 1992. A total of 547 species were collected and divided in: primary pests: 13; secondary pests: 20; species without defined importance to eucalyptus: 79; and non-identified species: 435. These four groups had a mean of 5231.29; 338.18; 438.16 and 2222.87 individuals with a total of 8229.87 individuals collected per trap. The number of species without defined importance to eucalyptus, and non-identified species, increased during the collecting period of five years while those of primary and secondary pests showed similar numbers in all years. The most collected primary pests Thyrinteina arnobia Stoll and Stenalcidia sp. (Geometridae) showed higher frequencies during the driest and coldest periods of the year, whereas Psorocampa denticulata Schaus (Notodontidae) was most frequent during periods of higher rainfall. Species of groups III and IV increased in diversity with eucalyptus age. This area has a high probability of outbreaks of eucalyptus defoliating caterpillars, especially T. arnobia. For this reason, lepidopteran pests should be monitored in this plantation during the driest and coldest periods of the year, when they can reach population peaks. Rev. Biol. Trop. 54(2): 553-560. Epub 2006 Jun 01.

Keywords

Eucalyptus sp., primary pests, Thyrinteina arnobia, diversity, conservation, Brazil