The area of cultivated eucalyptus in Brazil reached 5,102,030 ha in 2012, of which 28.2% is located in Minas Gerais, the largest producer in the country. The expansion of areas planted with eucalyptus is a result of a range of factors that favor large-scale planting of this genus, such as the fast-growing, short rotation cycles and high productivity (ABRAF 2013). The need for supplying raw materials for industries leads to the need for expanding monocultures, and eventually leads to the emergence of insect pests at high levels (Schowalter et al. 1986).

Defoliator beetles are an important group of pests for forestry because they cause damage to plants in the seedling stage, in nurseries, and mature trees in the plantation. Among eucalyptus defoliator beetles in the plant’s native range, the most important are those belonging to the families Curculionidae, Scarabaeidae, and Chrysomelidae (Ohmart and Edwards 1991). In Brazil, beetles of the families Cerambycidae, Scarabaeidae, and Buprestidae are among the main pests that attack this crop (Anjos and Majer 2003; Garlet et al. 2011). Buprestids in the genera Psiloptera Dejean, 1833 and Lampetis Dejean, 1833 have been reported to cause damage in eucalyptus plantations in Brazil (Silva et al. 1968; Anjos and Majer 2003; De Nadai et al. 2012).

Species of Lampetis are important defoliators in new plantings, occurring mainly in areas planted in a minimum tillage system. Injury is caused by the adults chewing the stems, which, when done on the apical branch, can lead to loss of apical dominance, to stagnation of growth, and to reduced height (Zanuncio et al. 1993; Anjos and Majer 2003). Given that these beetles can cause significant problems in eucalyptus plantations, our objective is to report the occurrence of an outbreak in a plantation located in the municipality of Grão Mogol, state of Minas Gerais, Brazil.

Sampling was conducted in December 2010 in a regrowth area of Eucalyptus urophylla S.T. Blake × Eucalyptus grandis Hill ex Maiden hybrids felled about two months earlier. There were other regrowth stands and cut and stored logs drying around the study area. One sampling was made in order to evaluate and calculate the incidence and severity of the injuries. One hundred eucalyptus stumps were randomly examined from the edge to the center of the plantation, and the number of shoots per stump and number of Lampetis beetles present on each stump were recorded. The severity of damage was evaluated on a scale of 0 to 5 (0 = no injury, 1 = lateral branches injured, 3 = main and lateral branches partially injured, and 5 = main and lateral branches totally injured). Overall incidence was calculated by dividing the number of beetles by the number of shoots.

Adult buprestids were collected as they fed and injured eucalyptus stems. They were then taken to the Laboratory of Forest Pest Management (DDE/CCB/UFV) in Viçosa, Minas Gerais, Brazil, where they were pinned, labeled, and identified based on comparisons with specimens in the Regional Museum of Entomology (UFVB).

The jewel beetle that was damaging the eucalyptus shoots was identified as Lampetis instabilis (Laporte and Gory) (Fig. 1A), and was present in an area of approximately 1,000 ha. The outbreak began in the first half of December 2010, which coincided with the rainy season, the period of greatest emergence of various beetles in this region.

Adult L. instabilis feed by chewing down the tender shoots on both the main and side branches (Fig. 1B); they also feed on the leaves and bark. The average number of shoots per stump was 7.2, whereas the average number of beetles per stump was 0.1, resulting in an incidence of about 1.8 beetles per 100 shoots. The average severity of damage was 0.85. We found no correlation...