

SHORT COMMUNICATION

The white-browed woodpecker *Piculus aurulentus* (Temminck, 1821) (Aves: Picidae) as a potential seed disperser of *Myrsine umbellata* Mart. (Myrsinaceae)

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Abstract

We describe the consumption of fruits of *Myrsine umbellata* Mart. (Myrsinaceae) by the white-browed woodpecker *Piculus aurulentus* (Temminck, 1821) based on seeds found in the digestive tract of one specimen collected in an *Araucaria* forest at Serra do Juncal (22°43'S, 45°53'W), southern Minas Gerais, south-eastern Brazil. It is possible that *P. aurulentus* is a disperser of seeds of *M. umbellata*, since these were found intact in the bird digestive tract, completely separated from their pulps, which could facilitate their germination.

Keywords: Piciformes, seed dispersal, frugivory, stomach content, Atlantic Forest

Woodpeckers feed mainly on arthropods, but some species also eat several types of plant matter, such as nuts, fruits, nectar and sap (Schubart et al., 1965; Sick, 1997; Winkler & Christie, 2002; Rocca et al., 2006). Frugivory is relatively common among Neotropical woodpeckers, especially in the genera *Melanerpes* and *Celeus* (e. g., Schubart et al., 1965; Skutch, 1980; Kattan, 1988; Poulin et al., 1994; Yamashita & Lo, 1995; Sick, 1997; Ruiz et al., 2000; Winkler & Christie, 2002). The diet of the majority of the species of *Piculus*, on the other hand, is based principally on insects, including ants, termites, beetles and their larvae (Moojen et al., 1941; Schubart et al., 1965; Winkler & Christie, 2002). Only three species in this genus have been mentioned as fruit-eaters: the grey-crowned woodpecker *P. auricularis* (Salvin & Godman, 1889), the golden-olive woodpecker *P. rubiginosus* (Swainson, 1820), and the crimson-mantled woodpecker *P. rivollii* (Boissonneau, 1840) (Wheelwright et al., 1984; Graham et al., 2002; Winkler & Christie, 2002). Dietary items of the white-browed woodpecker, *P. aurulentus* (Temminck, 1821) are poorly known and, to date, it is only reported that it feeds on ants, beetles and bugs

(Schubart et al., 1965; Winkler & Christie, 2002). This is a near-threatened bird species, endemic of the Atlantic Forest (Winkler & Christie, 2002; BirdLife International, 2007). Here, we record the consumption of fruits and possible dispersal of seeds of *Myrsine umbellata* Mart. (Myrsinaceae) by this woodpecker.

On March 7, 2007, an adult male *P. aurulentus* (skull 100% pneumatized, testes 3.1 x 2.3 mm) was collected in an *Araucaria* forest at Serra do Juncal (22°43'S, 45°53'W; elevation: 1,940 m), part of the Mantiqueira Range, in the municipality of Gonçalves, southern Minas Gerais, south-eastern Brazil. The vegetation of this region had been previously surveyed (França & Stehmann, 2004; Melo & Salino, 2007). This specimen was prepared as a study skin and deposited in the Ornithological Collection of the Taxonomic Collections of the Universidade Federal de Minas Gerais (UFMG), currently in the Departamento de Zoologia, UFMG (DZUFMG 5644 – Fig. 1). This seems to be the first specimen of *P. aurulentus* collected in Minas Gerais state (see Mattos et al., 1993; Vasconcelos & D'Angelo-Neto, 2009). We found 48 seeds of *M. umbellata* in its digestive tract (from crop to intestine), completely separated from their pulps. We also found fragments of ants in its stomach, belonging to the genera *Brachymyrmex* (two individuals), *Pheidole* (six individuals – two workers, four soldiers), *Solenopsis* (one individual), and *Azteca* (one individual).

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Figure 1 - Specimen of *Piculus aurulentus* (DZUFMG 5644) collected at Serra do Juncal. Photo: D. Hoffmann.

This is the first record of fruit consumption by *P. aurulentus*. In a detailed study carried out in Itatiaia, also in the Mantiqueira Range, Pineschi (1990) found 104 bird species feeding on fruits of seven species of *Myrsine* (formerly included in *Rapanea*), but he failed to record *P. aurulentus*. Since woodpeckers are thought to act as important seed dispersers, especially when they swallow the entire fruits (Stiles, 2000; Winkler & Christie, 2002), it is possible that *P. aurulentus* is a disperser of seeds of *M. umbellata*, because these seeds were intact in its digestive tract and they were completely separated from their pulps, which could facilitate their germination. Detailed studies are recommended to check seasonal variation on fruit consumption by *P. aurulentus* and its potential as seed disperser of *M. umbellata* and other plant species.

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