

# First records of *Plagiolabra* von Schulthess (Hymenoptera: Vespidae) from Brazil

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**Abstract:** *Plagiolabra* von Schulthess has only two recognized species and both were only recorded previously from Argentina and Paraguay. The two species of the genus were collected in Brazil for the first time, indicating that the biota of Mato Grosso do Sul has elements of the Chacoan province, thus indicating the importance for conservation of this area which is the only representative of the Chaco biome in Brazil.

**Key words:** Brazilian Chaco, potter wasps, *Plagiolabra andina*, *Plagiolabra nigra*

*Plagiolabra* von Schulthess, 1903 may be recognized by the broad axillary fossae, tegula laterally emarginated and the propodeal dorsum nearly horizontal (Carpenter and Cumming 1985; Carpenter and Garcete-Barrett 2002). *Plagiolabra* is restricted to South America and possesses two described species: *P. nigra* von Schulthess, 1903, and *P. andina* Brèthes, 1906. Both species previously had records only for Argentina and Paraguay, occurring approximately between 20° and 31° latitude south and between 69° and 55° longitude west (Hermes 2007).

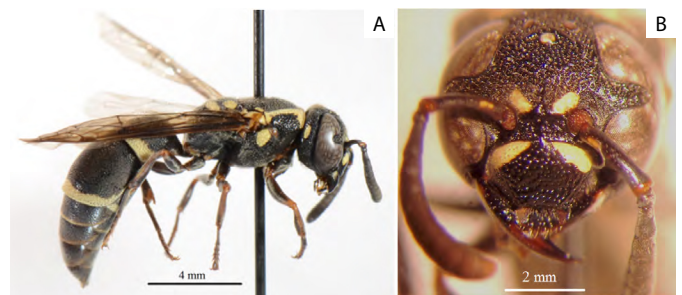
Although there are few specimens of the *Plagiolabra* deposited in scientific collections, records indicate a wide distribution in the Chacoan province and the transitions areas with the Pampean province and the Monte province, both in Argentina and the Parana Forest province in Paraguay (Hermes 2007). The Chacoan province comprises the territories from southern Bolivia, western Paraguay, southern Brazil and the central-north of Argentina (Morrone 2000, 2006, 2014). Brazilian Chaco is exclusive to the municipality of Porto Murтинho, in the state of Mato Grosso do Sul, in a transition area comprising Cerrado province and Parana Forest province, in the Pantanal sector (Noguchi *et al.* 2009; Souza *et al.* 2010). This region possesses different vegetation types, and contains high species diversity (Silva *et al.* 2008).

On October 2010 the two species of *Plagiolabra* were collected using entomological nets along a 4 km transect in Brazilian Chaco (21°26'56" S, 57°54'30" W), in Wooded Savannah Steppe (Pott and Pott 2003). The samples were collected between 09:00 to 16:00 over five days. The species were identified by specialists and voucher specimens (single

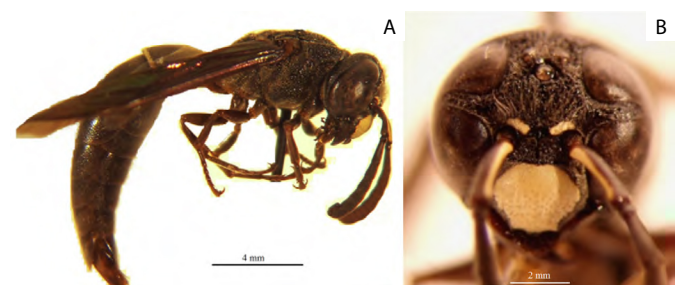
individuals of each species) are deposited at the Museu de Biodiversidade (MuBio) of the Universidade Federal da Grande Dourados (UFGD), Dourados, Mato Grosso do Sul state, Brazil.

The samples consisted of one female of *Plagiolabra andina* (Figure 1) and a male of *P. nigra* (Figure 2). Both species were collected at Porto Conceição farm, in Porto Murтинho municipality. *Plagiolabra nigra* has only three records for Argentina and seven for Paraguay (Hermes 2007), and a modest latitudinal distribution (Figure 3). *Plagiolabra andina* was recorded from only two sites in northern Argentina, and one record in western Paraguay (Hermes 2007).

The Chacoan province presents a biotic composition characterized by a relatively high rate of endemism, including some species of wasps (Colombo de Correa 1998; Zanella 2010; Morrone 2014). Within Brazil, *P. nigra* and *P. andina* may be restricted to Porto Murтинho municipality, because this locality represents the sole area with a Chacoan phytofisionomy.



**Figure 1.** *Plagiolabra andina* Brèthes, 1906 ♀ sampled in Mato Grosso do Sul State, Brazil. A, habitus; B, head.



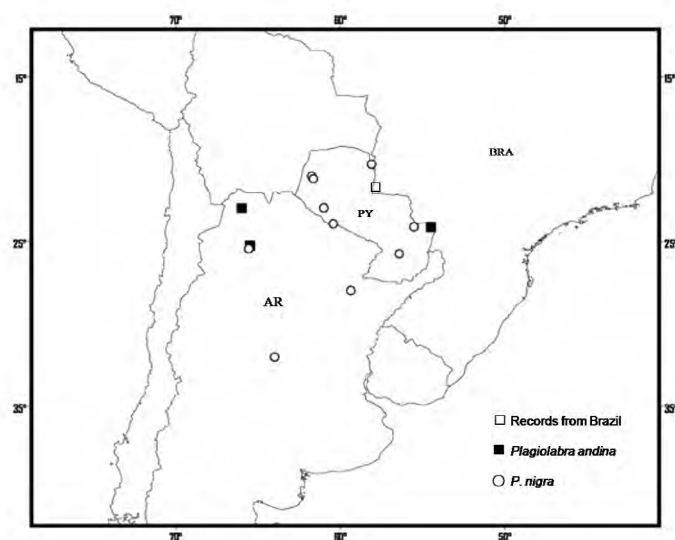
**Figure 2.** *Plagiolabra nigra* von Schulthess, 1903 ♂ sampled in Mato Grosso do Sul State, Brazil. A, habitus; B, head.

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**Figure 3.** Sites indicating the records of occurrences of two species of *Plagiolabra* von Schulthess, 1903 in Chacoan province (modified from the Hermes 2007).

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