



## A new species of *Moldenhawera* (Leguminosae) from Brazilian Atlantic Forest

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### Abstract

*Moldenhawera* is a small genus of caesalpinioideae legumes from eastern Brazil, characterized by the presence of T-shaped trichomes, flowers lacking a hypanthium, clawed petals with wrinkled margins, and dimorphic androecium with only one fertile stamen. *Moldenhawera longipedicellata* is described as a new species from the Atlantic Forest phytogeographical domain in Espírito Santo State, Brazil. It is similar to *M. floribunda*, *M. polysperma* and *M. papillanthera* by presenting slender staminodia filaments, longer than the anthers. However, it can be distinguished from those related species by the once-pinnate leaves (vs. bipinnate), flowers with long pedicels (2–5.9 cm long) and larger sepals (16–25 × 4–8 mm) and petals (petal claw 10–19 mm long and petal blade 14–24 × 13–23 mm).

**Key words:** Atlantic Forest, Caesalpinioideae, *Dimorphandra* clade, Fabaceae, Neotropics

*Moldenhawera* Schrader (1821: 718) is a small genus of Leguminosae with ten described species (Queiroz *et al.* 1999, Lewis & Queiroz 2010). The genus was placed in tribe Caesalpinieae in an informal *Peltophorum* group by Polhill & Vidal (1981), but more recent phylogenetic studies have demonstrated that *Moldenhawera* is part of a heterogeneous paraphyletic grade at the base of the Mimosoideae lineage together with *Diptychandra* Tulasne (1843: 139), *Pachyelasma* Harms (1913: 428), and *Erythrophleum* Afzel. ex Brown (1826: 235) (Manzanilla & Bruneau 2012).

The genus comprises species of trees and shrubs with biramous (T-shaped) trichomes, compoundly pinnate stipules, a racemose inflorescence, flowers lacking a hypanthium, yellow or pink clawed petals, a dimorphic androecium with only one long fertile stamen with a pubescent connective (all other stamens reduced to short staminodia) and the fruit a woody, dehiscent pod (Queiroz *et al.* 1999). *Moldenhawera* is divided into three sections: section *Moldenhawera* Queiroz *et al.* (1999: 831), section *Acuminatae* Queiroz *et al.* (1999: 837), and section *Brasilianae* Queiroz *et al.* (1999: 838) based on leaf division (once-pinnate or bipinnate), length of staminode filaments, and anther dehiscence of the staminodes (rimose or poricidal).

*Moldenhawera* is endemic to extra-Amazonian eastern Brazil, from Bahia to Rio de Janeiro states, including Minas Gerais. Additionally one species (*M. acuminata* Fernandes & Bezerra, 1982: 58) is disjunct from the main distribution area, occurring in Maranhão state. The major center of diversity is in the Atlantic Forest phytogeographical domain where seven out of the ten species occur (Lewis & Queiroz 2010).

Leguminosae is the second richest family in the Atlantic Forest and several species have been described from this region in relatively recent times (Forzza *et al.* 2010). In the course of taxonomic and phylogenetic studies of *Moldenhawera*, a new species was found in Atlantic Forest of Espírito Santo State. It is here described and illustrated.

### *Moldenhawera longipedicellata* C.V. Vivas & L.P. Queiroz, *sp. nov.* (Fig. 1)

*Moldenhawera longipedicellata* belongs to sect. *Moldenhawera* as it shares with *M. floribunda*, *M. papillanthera*, and *M. polysperma* the slender staminode filaments which are much longer than the anthers. It can be differentiated from the remaining species of the section by its once-pinnate leaves (vs. bipinnate or partially bipinnate), the length of its pedicels, 2–5.9 cm long (vs. 1.2–3.2 cm long, Queiroz *et al.* 1999), larger flowers with sepals 16–25 mm long (vs. sepals 7–12 mm long, Queiroz *et al.* 1999), longer petal claws