

Capillipedium magdaleni M.R.Almeida.: A new locality and Taxonomic treatment of a Rare, Endemic grass from Western Ghats area of Karnataka, India

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ABSTRACT

This communication delineates the taxonomic treatment and new locality of rare, endemic grass *Capillipedium magdaleni* M.R.Almeida from the Western Ghats region of Karnataka. During the exploration of grasses in central Western Ghats of Karnataka from 2017 to 2019, an intensive search was made and observed this species from Bhimeshwar falls of Sharavathi Wild life sanctuary. This rare, endemic grass is restricted to Agumbe, Ko-dachadri and Bhimeshwar falls of Karnataka.

Key words: Agumbe, Kodachadri hills, Western Ghats, Sharavathi Wild life sanctuary, *Capillipedium magdaleni*.

The *Capillipedium* genus belongs to Andropogoneae tribe, Panicoideae sub family of the family Poaceae. They are usually distributed in tropical countries with the representation of 14 species, among them 7 Species in India (Bor 1960; Kabeer 2009). The species *C. magdaleni* is different from other species of same genus by its long awn up to 6cm long. In 1972 Almeida collected this grass species for the first time from Onake abbi falls of Agumbe, Karnataka and described as *Capillipedium magdaleni* to dedicate his mother Magdalin and he deposited holotype at BLAT, Bombay and isotypes in KEW, United Kingdom (Almeida 1974). Later Bhat (2001) congregated this species from Kodachadri hills of Mookambika wild life sanctuary, Karnataka during the survey of sedges and grasses of Udupi and Dakshina Kannada Present work was conducted during the year 2017 to 2019 and we came across this species from Bhimeshwar falls of Sharavathi Wildlife sanctuary (N 14.0642 and E74.7206) at the elevation of 484 meter on the moist rocky substratum. When compared with other two localities, this area showed little bit high population patches viz. 9 (In Agumbe only 5 patches and in Koda-chadri only 2 patches).

TAXONOMIC TREATMENT

Capillipedium magdaleni M.R.Almeida in J. Bomb. Nat. Hist. Soc. 72: 813. 1974. *Dichanthium magdaleni* (Almeida) Jain & Deshpande in Bull. Bot. Surv. Ind. 20: 135. 1978.

An sub erect or rarely erect perennial grass. Culms up to 10 – 15 cm high with geniculate branching and glabrous node. Leaves 4-6 cm x 0.3- 0.4 cm, linear-lanceolate, acuminate apex; Leaf and leaf sheath covered with tubercle based hairs. Ligule membranous and ciliate. Panicle inflorescence with 1-3 joints and 2-3 cm length. Joints having translucent median furrow and ciliate. Sessile spikelet 0.2 cm long, linear- lanceolate. Lower glume 0.2 cm long, 5- nerved, slightly inflexed margin with villous back. Upper glume 0.2 cm long, 3-nerved, acute, boat shaped with glabrous back. Lower

lemma 0.15 cm long, hyaline, nerveless. Upper lemma with 4-6 cm awn. Palea absent. Pedicelled spikelet 3mm long, lanceolate; pedicel 1mm long with small hairs. Lower glume 3mm long, 7 nerved. Upper glume 2.5 mm long, hairy. Lower lemma hyaline and upper lemma absent (Figure 1).

Phenology: November to December.

Distribution: Endemic to Western Ghats. Agumbe (Type locality) to Kodachadri hills of Mookambika Wildlife Sanctuary (Bhat 2001) and Bhimeshwara falls of Sharavathi Wildlife Sanctuary, Karnataka, India.

Distributional status in Karnataka: Rare, Endemic.

Habitat: Found mainly on water falls sides on moist rocky area.

Conservation management: *Capillipedium magdaleni* M.R.Almeida is a rare grass species and it is restricted to 16 population patches of three localities in Western Ghats of Karnataka. All the three localities are comes under human recreation area, in that Bhimeshwar and Onakeabbi (Agumbe) water falls of Karnataka is regular people visiting spot. This is the big threat to the distribution and also survival of the grass species in the study site. For the purpose of conservation, we collect 7 sam-ples and 20 seeds from the Bhimeshwar water falls and relocate in different sites of moist rocky substratum in Ghats of Agumbe. In future also we follow the relocation strategies for the conservation of this rare, endemic grass species in Karnataka.

Exsiccate: India, Karnataka, Shivamogga, Sharavathi Wildlife Sanctuary, Bhimeshwara falls, Karnataka. 8. Dec 2018. Abhijit H U, KUAB477.

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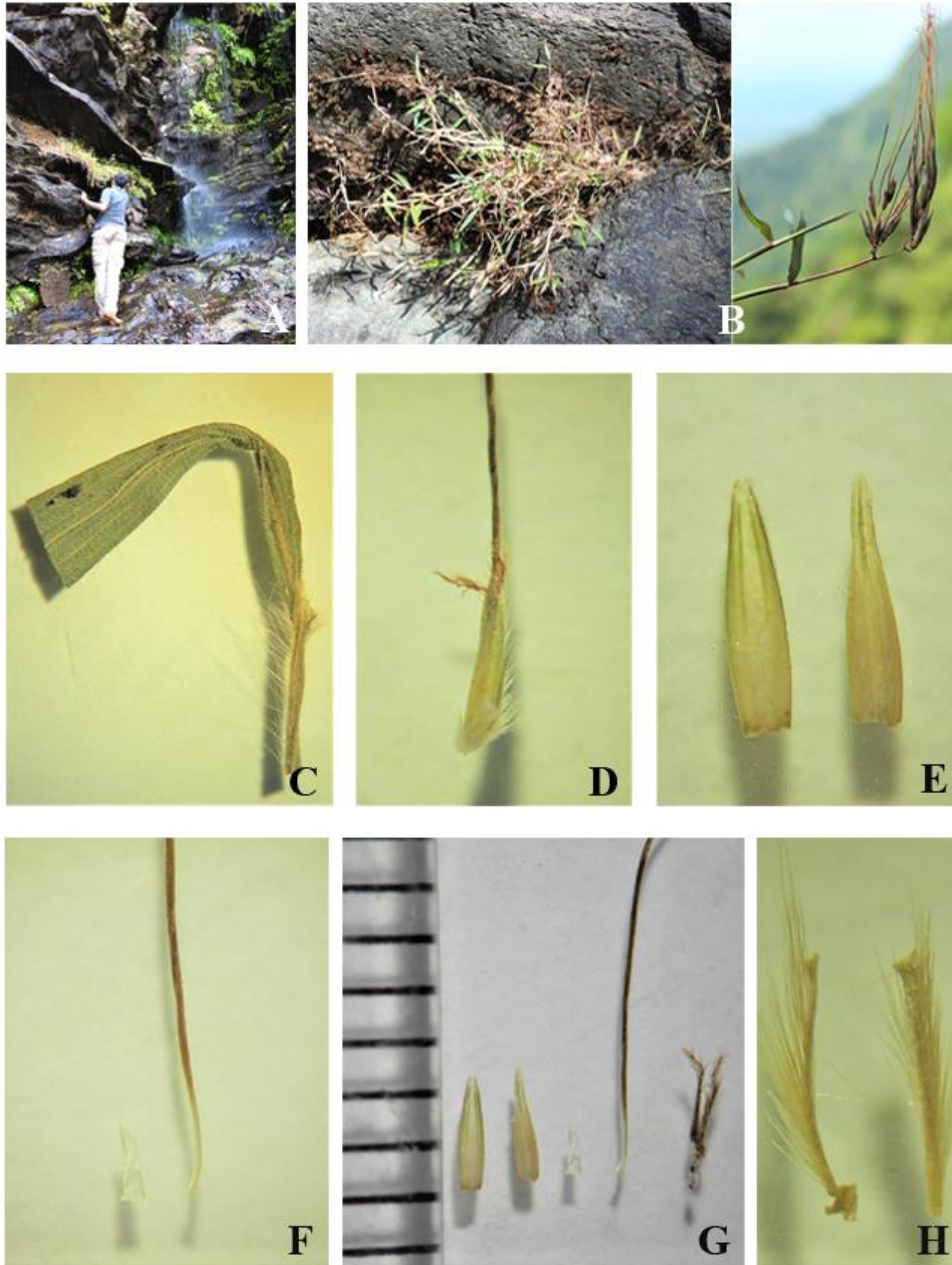


Figure 1. *Capillipedium magdalenii* M.R.Almeida. A- Habitat; B- Habit; C- Leaf with Ligule; D- Spikelet; E- Lower and Upper Glume; F- Lower & Upper Lemma ; G - Dissected grass with measurement; H-Joint.

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