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New Record

ARTEMISIA MYRIANTHA WALL EX BESS VAR. *PLEIOCEPHALA* (PAMP.) Y. R. LING (ASTERACEAE) - A NEW FLORAL RECORD OF MANIPUR, INDIA

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ABSTRACT
The present study reports *Artemisia myriantha* var. *pleiocephala*, belonging to the family Asteraceae, as new additions to the flora of Manipur. Here, we present descriptions, line drawings and photographs of the plant for easy identification. This species is similar to *A. nilagarica* (C.B.Clarke) Pamp., the most common *Artemisia* species distributed throughout Manipur, but different in their flowering pattern arrangement and leave structure.

Keywords: *Artemisia Myriantha Var. Pleiocephala, New Record, Asteraceae, Manipur*

INTRODUCTION
Artemisia is one of the largest genus of the Asteraceae family and Anthemideae tribe, comprising more than 500 taxa at the specific or sub-specific level (Hayat *et al*., 2009). About 45 species are found in India (Shah, 2014). In Manipur, the genus is represented by three species viz., *A. maritime* Linn, *A.parviflora* Roxb. and *A. nilagirica* (C.B. Clarke) Pamp (Dev, 1961; Sinha, 1996). While exploring the *Artemisia* species throughout Manipur, the authors came across a new specimen of *Artemisia* which resembles *A. nilagirica* (Table1).
After critical examination with the help of relevant literature and comparison with type specimens deposited in BSI, Shillong, India, the specimen was identified as *Artemisia myriantha* var. *pleiocephala*. Detailed study and observations revealed its distinctness from the known taxa, and is described here as a new record. This species was earlier reported from some other states of India like Belgaum, Western Himalayas, Jammu and Kashmir, Himachal Pradesh and Karnataka (Ling, 1987; Bagchi *et al*., 2009; Shah, 2014), but never from Manipur. Hence, this is reported as a new distributional record for the flora of Manipur. A detailed description and color photographs are provided for easy identification of the species.

DISCUSSION
Artemisia myriantha var. *pleiocephala* (Pampanini) Ling (1987) (Figure 1 and Figure 2).

Type Specimen
India, Manipur, Thoubal District, Thongjao, 24°43´N, 93°93´E, ± 795 m, 16 Feb 2013, *M Nganthoi* MND03 (Lectotype: NP Balakrishnan-49803! at BSI, Shillong, India).

Description
Herbs, perennial, 70-180 cm tall; stem striated to shallowly grooved with or without reddish tinged, canescent; leaf blade oblong, ovate or elliptic, 5 to 18.5 cm long; abaxially grey arachnoid hairsometimes glaberescent, glandular pubescent on veins; adaxially tomentose, densely glandularpubescent; middle leaf one to two (or three) pinnatipartite or sub-pinnatisect segments three to sixpairs; leaf shape elliptic, lacinate, elliptic-lanceolate or ovate elliptic occasionally with one or twoserration; leaf apex mucronulate or acuminate; rachis winged; uppermost leaves pinnatipartitesegments two or three pairs; synflorescence broad, much branched panicle; capitula many,heterogamous, companulate; involucre oblongovoid or oblong, 1.5 to three mm in diameter;pyramidal panicle upwardly directed primary and secondary branches; phyllaries sparsely arachnoid puberulent or glabrescent; marginal fertile female florets four to nine, bidented, 2.5 to three mm long; disk florets four to nine, narrowly companulate, 1.4-1.7mm long, bisexual; achenes elliptic, oblong, 0.75-1.2 mm long, smooth, truncate at the apices, faintly striate.

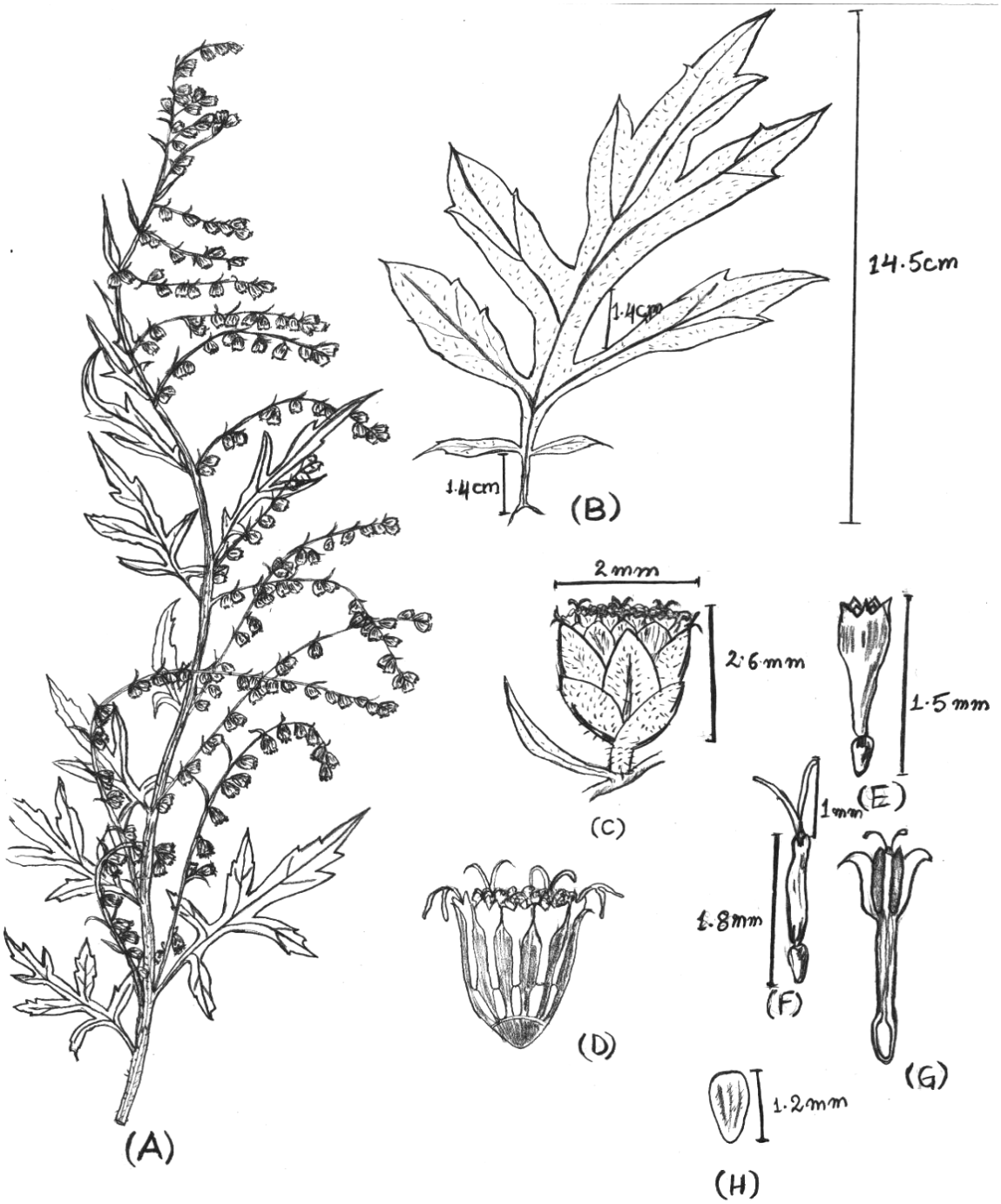

Figure 1: *A. Myriantha* Var. *Pleiocephala:*
(A) Upper Portion of Flowering Stem,
(B) Leaf from Middle Portion of Plant,
(C) a Capitulum,
(D) Longitudinal Section of Capitulum,
(E) Bisexual Floret,
(F) Female Floret,
(G) Longitudinal Section of Bisexual Floret, and
(H) Achene

New Record

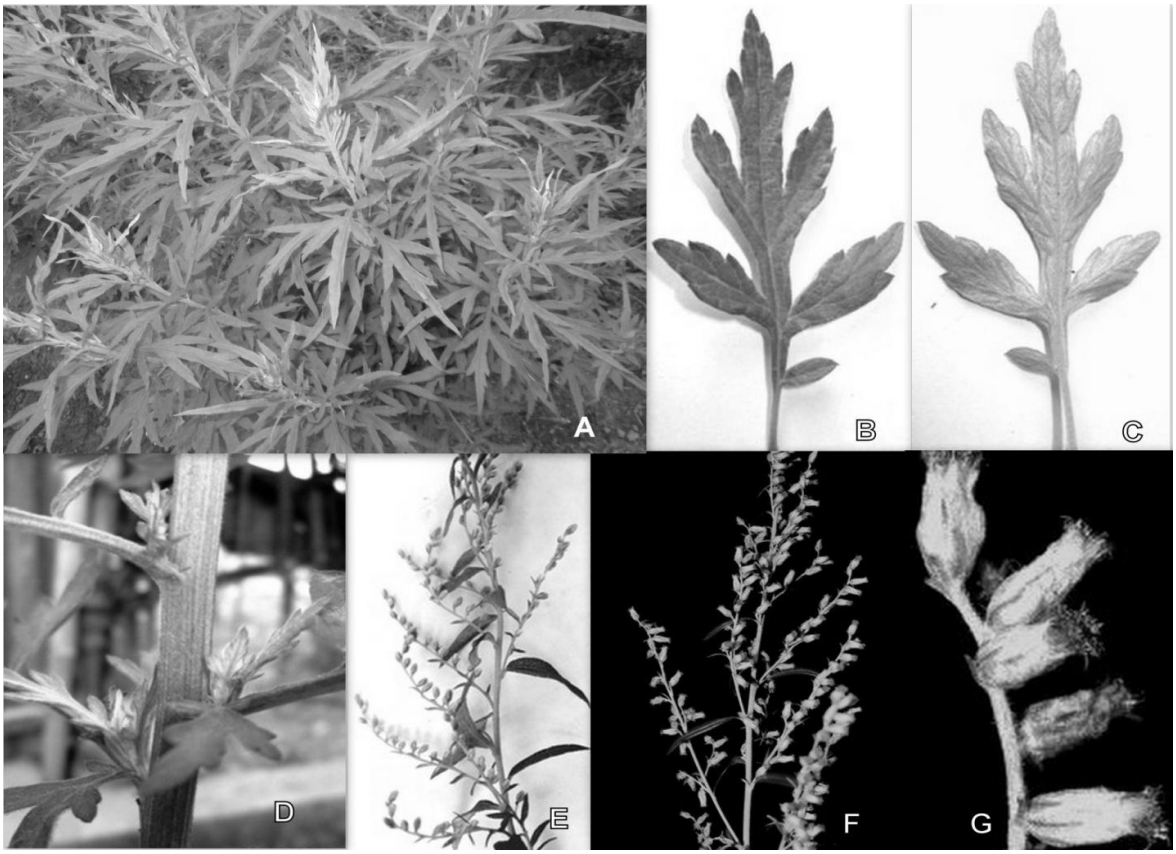

Figure 2: Morphology of *A. Myriantha* var. *Pleiocephala:* (A) Habitat, (B) Abaxial Side of Leaf, (C) Adaxial Side of Leaf, (D) Stem, (E) Upper Portion of Young Flowering Stem, (F) Upper Portion of Mature Flowering Stem, and (G) Magnified Capitula

Phenology: Flowering from August to November; fruiting from December to January.
Vernacular Name: Laibakngou mayat yatpi.
Distribution: India (Belgaum, Western Himalayas, Jammu and Kashmir, Himachal Pradesh and Karnataka) (Ling, 1987; Bagchi *et al*., 2009 and Shah, 2014), China (Guizhou, Qinghai, Sichuan, Xizang, Yunnan), Bhutan, North Myanmar, Nepal, North Thailand (Ling, 1987 and Shi *et al*., 2011).
Habitat: Slopes, roadsides, shrublands, cultivated fields, thickets, forests, between 800-2800 m.
Conservation Status: This taxon has not yet been assessed for the IUCN Red List (IUCN, 2012).
Uses: The plant is used in traditional Chinese medicine for treating menorrhagia inflammatory diseases (Wong *et al*., 2002a). Phytochemical analysis of this species shows the presence of fulvenoguaianolide, germacranolides, guaianolide and arglabin (Wong *et al*., 2002a and 2002b), which are known to be anti-cancerous.
Essential oils have been shown to contain chrysanthenone, camphor, limonene, cadinene and 1, 8, cineole (Bagchi *et al*., 2009). In Manipur, the plant has been used as traditional medicine by local healers to cure many diseases and as insecticide and antiseptic. Leaves of this plant are also used in making cuisines and local hair care lotion.

Note

A. myriantha var. *pleiocephala* is morphologically close to *A. nilagarica* (C.B.Clarke) Pamp. but different in their arrangement of flower and leave structure while critically examined.
The distinguishing characters of *A. myriantha* var. *pleiocephala* and *A. nilagirica* (C.B.Clarke) Pamp. are given in Table 1.

Table 1: Distinguishing Characters between *A. Myriantha* var. *Pleiocephala* and *A. Nilagirica*

Artemisia Myriantha* var. *Pleiocephala	***Artemisia Nilagirica***
Height of the plant is up to 180 cm tall.	Height of the plant is up to 200 cm tall.
Stems striated and sparsely canescent.	Stems shallowly sulcate and tomentose.
Leaves oblong ovate or elliptic, mucronate and sub-pinnatisect.	Leaves broadly ovate, acuminate and pinnatipartite.
Abaxial side of leaves are glabrous or sparsely hairy	Abaxial side of leaves have arachnoid hairs.
Synflorescence densely arranged along the branch.	Synflorescence loosely arranged along the branch.

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