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

Mayengbam Nganthoi and *Keithellakpam Sanatombi
Department of Biotechnology, Manipur University, Imphal, India
*Author for Correspondence

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, canescence; leaf blade oblong, ovate or elliptic, 5 to 18.5 cm long; abaxially grey arachnoid hairs sometimes glabrescent, glandular pubescent on veins; adaxially tomentose, densely glandular pubescent; middle leaf one to two (or three) pinnatifid segments three to six pairs; leaf shape elliptic, lacinate, elliptic-lanceolate or ovate elliptic occasionally with one or two serration; leaf apex mucronulate or acuminate; rachis winged; uppermost leaves pinnatifid segments two or three pairs; synflorescence broad, much branched panicle; capitula many, heterogamous, comtanulate; 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 comtanulate, 1.4-1.7mm long, bisexual; achenes elliptic, oblong, 0.75-1.2 mm long, smooth, truncate at the apices, faintly striate.
**New Record**

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 fulvenoguanolide, germacranolides, guaianolide and arglabin (Wong et al., 2002a and 2002b), which are known to be anticancerous.

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.
**New Record**

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

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

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**REFERENCES**


