

**Contributions to the Flora of Myanmar VIII: *Aristolochia kachinensis*, a New Species of Subgenus *Siphisia* (*Aristolochiaceae*) from Kachin State**

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A new species of *Aristolochia* L. subgenus *Siphisia* (Duch.) O.C.Schmidt, *A. kachinensis* Ohi-Toma, Nob.Tanaka & J.Murata (*Aristolochiaceae*) is described and illustrated. The new species is characterized by ring-shaped limb densely covered with dark purplish warts and white to pale pinkish-white throat of the perianth tube, and is thus far known only from Kachin State, northern Myanmar.

**Key words:** *Aristolochia kachinensis*, Hukaung Valley, Kachin, Myanmar, subgenus *Siphisia*.

A field exploration to the Hukaung Valley Tiger Reserve, Kachin State, northern Myanmar (star in Fig. 1), one of the largest national parks in Myanmar, in December 2005, resulted in the discovery of a hitherto undescribed species of *Aristolochia* L. subgenus *Siphisia* (Duch.) O.C.Schmidt (*Aristolochiaceae*) (Fig. 2). In Myanmar, 12 species of *Aristolochia*, of which five [*A. cucurbitoides* C.F.Liang, *A. griffithii* Hook.f. & Thomson ex Duch., *A. saccata* Wall., *A. transsecta* (Chatterjee) C.Y.Wu, *A. wardiana* J.S.Ma] belong to subgenus *Siphisia*, are listed in the checklist (Kress et al. 2003). Recently,

two new species of the subgenus were added to the flora of Myanmar: *A. sinoburmanica* Y.H.Tan & B.Yang (Yang et al. 2018) and *A. tongbiguanensis* J.Y.Shen, Q.B.Gong & Landrein (Gong et al. 2018) (= *A. bhamoensis* T.V.Do & Jian W.Li; Do and Li 2018, also refer to Zhu et al. 2019b), both of which were discovered from Kachin State of Myanmar and Yunnan Province of China (Fig. 1).

The new species is characterized by ring-shaped limb densely covered with dark purplish warts and white to pale pinkish-white throat of the perianth tube (Figs. 2–4). It is

observed in early December.

Note: Our previous molecular phylogenetic analysis indicated that *Aristolochia kachinensis* was related to *A. cathcartii* Hook.f. and *A. saccata* Wall. in Indian Himalayan regions [“*sp.* (Myanmar-162)” in fig. 3; Ohi-Toma et al. 2021]. However, *A. kachinensis* is easily distinguished from *A. cathcartii* (outside of perianth tube white with reddish purple veins, throat of the perianth tube pale yellow with reddish purple dots, and perianth limb with inner surface densely covered by dark-purple bristles) and *A. saccata* (throat of the perianth tube yellow).

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#### References

- Do T.V. and Li J.-W. 2018. *Aristolochia bhamoensis* sp. nov. (*Aristolochiaceae*) and a diagnostic key to all known *A.* subgen. *Siphisia* species from Myanmar. *Nord. J. Bot.* **36**: e01909.
- Gong Q.-B., Landrein S., Xi H.-C., Ma X.-D., Yang Z.-H., He K.-W. and Shen J.-Y. 2018. *Aristolochia tongbiguanensis*, a new species of *Aristolochiaceae* from Yunnan, China. *Taiwania* **63**: 183–187.
- Kress W.J., DeFilipps R.A., Farr E. and Kyi D.Y.Y. 2003. A checklist of the trees, shrubs, herbs, and climbers of Myanmar. *Contr. U.S. Natl. Herb.* **45**: 1–590.
- Ohi-Toma T., Watanabe-Toma K., Li P., Sugawara T. and Murata J. 2021. *Aristolochia vestita*, a new species of subgenus *Siphisia* (*Aristolochiaceae*) from Zhejiang, China. *J. Jpn. Bot.* **96**: 253–263.
- Yang B., Ding H.-B., Zhou S.-S., Zhu X., Li R., Maw M.B. and Tan Y.-H. 2018. *Aristolochia sinoburmanica* (*Aristolochiaceae*), a new species from north Myanmar. *PhytoKeys* **94**: 13–22.
- Zhu X.-X., Li X.-Q., Liao S., Du C., Wang Y., Wang Z.-H., Yan J., Zuo Y.-J. and Ma J.-S. 2019a. Reinstatement of *Isotrema*, a new generic delimitation of *Aristolochia* subgen. *Siphisia* (*Aristolochiaceae*). *Phytotaxa* **401**: 1–23.
- Zhu X.-X., Liao S., Tan Y.-H., Shen J.-Y. and Ma J.-S. 2019b. *Aristolochia bhamoensis* is a taxonomic synonym of *A. tongbiguanensis*, and now the correct name is *Isotrema tongbiguanense*. *Phytotaxa* **404**: 292–294.

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2005年12月のミャンマー・カチン州での植物調査により採取したウマノスズクサ属オオバウマノスズクサ亜属 *Aristolochia* subgenus *Siphisia* 植物を新種 *A. kachinensis* Ohi-Toma, Nob.Tanaka & J.Murata として発表する。この種は、濃紫色の細かいいぼ状の突起を密布する花被筒の舷部が、2018年にカチン州から記載された *A. sinoburmanica* Y.H.Tan & B.Yang に似ているが、舷部が浅く3裂した

環形になる点、花被筒の喉部が白色になる点、花がより縦に長い点などにより区別される。

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