

An overview of *Murdannia* (Commelinaceae) in Thailand

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Abstract

An account of *Murdannia* in Thailand based on field collections, literature study and the examination of herbarium specimens from Thai and international herbaria (i.e. AAU, BK, BKF, K, KKU and QBG) is nearing completion. The genus is one of the largest genera in Commelinaceae and is widely distributed in tropical and subtropical regions, mainly in Asia. *Murdannia* is distinguished from other members of the family by its bearded filaments, 2–3 fertile stamens, 3–4 staminodes and pedicellate flowers. In Thailand, 18 species have been enumerated, three of which, *Murdannia clandestina* (Ridl.) Faden, *M. divergens* (C.B. Clarke) G. Brückn. and *M. pauciflora* G. Brückn. are reported as new records. So far, two unknown species have been discovered. A revised checklist of the Thai *Murdannia* is presented.

Material & Methods

- 01 Literature reviews and herbarium materials
- 02 Field collections
- 03 Taxonomic work and morphological descriptions

Results & Conclusion

In preparing the treatment of tribe Commelinae for the Flora of Thailand account, 18 species of *Murdannia* in Thailand have been recognized and a revised checklist represents in Table 1. In addition, two *Murdannia* species are recently discovered from sandy areas of marshes in Ubon Ratchathani and Sakon Nakhon provinces, the eastern and north-eastern regions of Thailand. *Murdannia* sp.1 is similar to *M. divergens* but it is distinguished by having a 1-lobed antherodes and without hairs on the mouth of leaf sheath (Figure 1a-1d). The second unknown species, *M. sp.2* is characterized by its filiform leaf, pubescent leaf surfaces and underground stem with bulb (Figure 1e-1g).

References

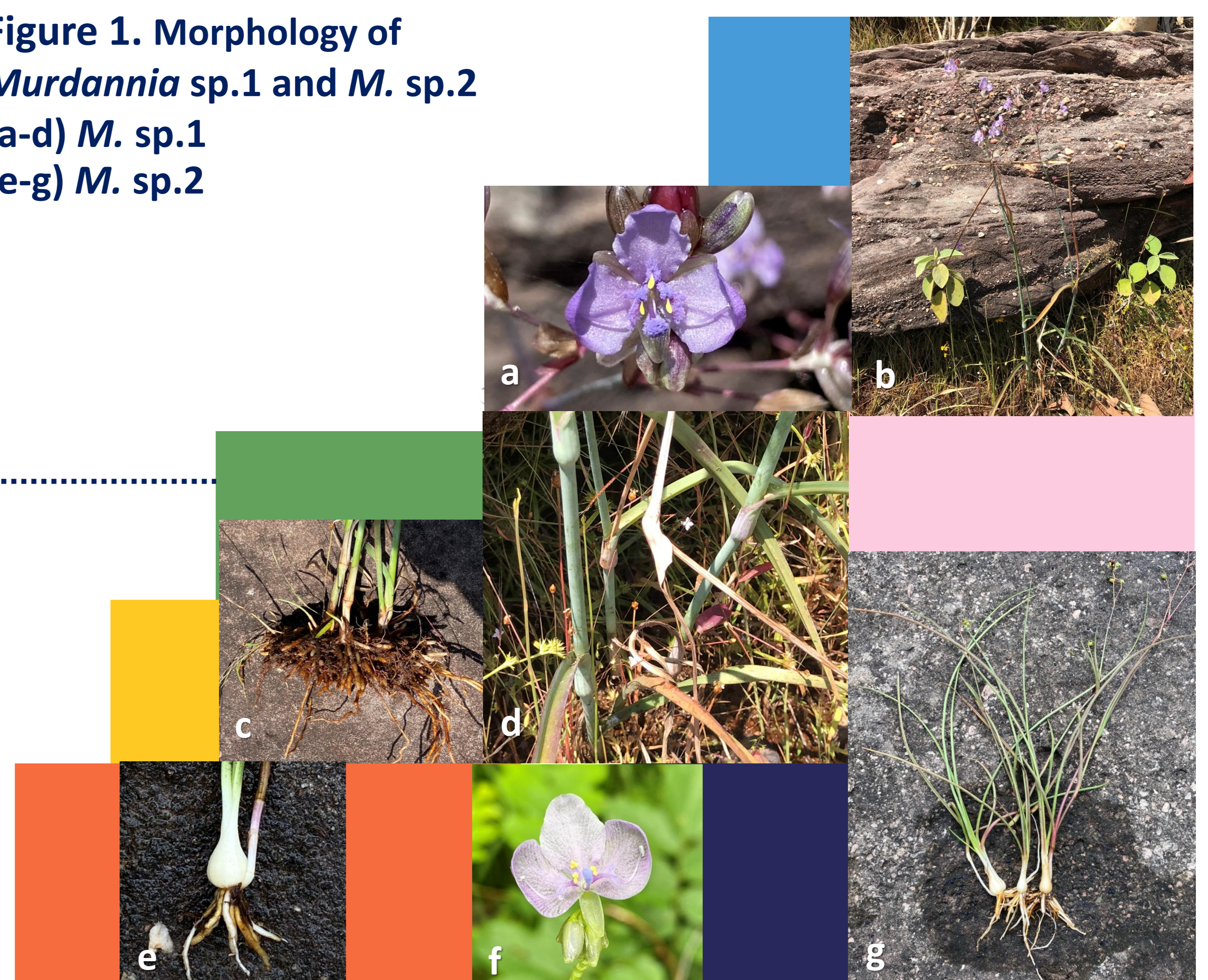
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Table 1 Comparison species number of *Murdannia* in Thailand between previous works and revised checklist by Kantachot et al.

	Thitimetharoach (2004 & 2013)	The Forest Herbarium (2014)	Kantachot et al. (2022, in prep.)
1. <i>M. bracteata</i>	-	-	●
2. <i>M. clandestina</i> **	●	-	●
3. <i>M. divergens</i> **	●	-	●
4. <i>M. discreta</i>	-	-	●
5. <i>M. edulis</i>	●	●	●
6. <i>M. gigantea</i>	●	●	●
7. <i>M. japonica</i>	●	●	●
8. <i>M. loriformis</i>	●	●	●
9. <i>M. macrocarpa</i>	●	●	●
10. <i>M. medica</i>	●	●	●
11. <i>M. nudiflora</i>	●	●	●
12. <i>M. pauciflora</i> **	●	-	●
13. <i>M. simplex</i>	-	-	●
14. <i>M. spectabilis</i>	●	●	●
15. <i>M. spirata</i>	●	●	●
16. <i>M. vaginata</i>	●	●	●
17. <i>M. sp.1</i>	●	-	●
18. <i>M. sp.2</i>	-	-	●
TOTAL	14	10	18

** = new record

Figure 1. Morphology of *Murdannia* sp.1 and *M. sp.2* (a-d) *M. sp.1* (e-g) *M. sp.2*



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