

Malaysian *Vanilla*: Species diversity, threats and conservation action plan

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Abstract

The diversity in *Vanilla* genus from Malaysia was updated after the checklist by Soto Arenas and Cribb (2010) with the discovery of two undescribed species and few new records which made up the genus to be most likely represented by nine species. In general, wild vanilla populations were difficult to locate and distributed in many habitats. The taxa localized in Peninsular and Borneo showed different physiological behaviour but experiencing similar depleting factors in their natural habitats. The Checklist of CITES Appendices rated *Vanilla* spp. under Appendix II which are not necessarily now threatened with extinction but their trade must be closely controlled and monitored. Malaysian *Vanilla* were observed to be vulnerable to several threats including poor taxonomic information and revision, forest fragmentation, natural disaster and natural leaves abscission phenomenon. A conservatory action plan was proposed to protect the genus from depletion as they served as important secondary gene pool in the crop improvement program of *V. planifolia* which produce one of the world precious flavouring agent, vanillin.

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