

## **Morphological Study of Trichomes in *Indigofera wightii* Grah. ex Wigh & Arn., Indigo Dye Species, Traditionally Used by “Thaisongdam” Thailand**

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**Abstract :** The study aimed to collect morphological data of secretory structures that contribute to taxonomy of *Indigofera*. Detail features of trichomes occurrence in vegetative and reproductive organs of *Indigofera wightii* Grah. ex Wigh & Arn., a species traditionally used as source of indigo to dye “Thaisongdam” clothing were investigated. Examination through light microscopy and scanning electron microscopy were done. Non secretory, T-shaped trichomes appeared throughout surfaces of stems, leaves, flowers and fruits. Secretory or glandular trichomes occurred in two types; one has big cylindrical head and short peduncle, distributed on adaxial surface of sepals and around the pedicel, whereas another possesses smaller cylindrical head but long peduncle. The latter was found on apical surface of immature pods. No phenolic and lipophilic compounds were detected from these glands.

**Keywords :** indigofera, trichome, Thaisongdam, Thailand

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