

Specification : DMTP1 Lanna Medicinal Plant Extract for Diabetes Patients /  
สารสกัดจากตำรับยาสมุนไพรล้านนาสำหรับผู้ป่วยโรคเบาหวาน DMTP สูตรที่ 1  
(Manose RM-0098)

(Application : An active ingredient for tonic food supplements in diabetes patients/  
สารสำคัญในผลิตภัณฑ์เสริมอาหารสำหรับผู้ป่วยโรคเบาหวาน)

1. Name of the raw material : DMTP1 Lanna Medicinal Plant Extract for Diabetes Patients
2. Active components : Tannin, saponin, xanthone, flavone, glycoside and alkaloid<sup>(1)</sup>
3. Common and scientific name/ Family of the plant : Takian Noo<sup>(2-3)</sup> (*Anogeissus acuminata* (Roxb. ex DC.) Gills. & Perr./ COMBRETACEAE)
4. Physical appearance : Brown solid with specific odor
5. pH : -
6. Standardization : HPLC fingerprint using quercetin<sup>(4)</sup> as a marker
7. Stability of active constituent : -
8. Solubility : Soluble in hot water (100 °C), cold water (25 °C), ethanol and methanol
9. Microbial contamination : No pathogenic microorganism with less than 1,000 cfu/g of the total plate count of bacteria, yeast and fungi which is conformed to the Thai FDA regulation
10. Biological activities : Antioxidant DPPH radical scavenging (SC<sub>50</sub> = 0.011 mg/ml) (standard vitamin C = 0.058 mg/ml)<sup>(1)</sup>
11. Animal / human performance test : Hypoglycemic effect 78.97% FBG reduction at 4 h with 100 mg/kg (glibenclamide = 44.87% and insulin = 71.79%)<sup>(1)</sup>

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12. Safety : LD<sub>50</sub> 3000 mg/kg (methanolic extract) in albino mice by oral administration, no considerable signs of toxicity
13. Pharmaceutical, food supplement or cosmetic applications : Food supplements in diabetes patients
14. Recommended concentrations in the product : 16.21 mg/kg body weight or as needed
15. Storage : Keep in tight container at cool place (4 °C) protected from light
16. Precautions : None
17. Cost per kg : Please request

## References

1. Manosroi J., Moses Z.Z., Manosroi W. and Manosroi A. Hypoglycemic activity of Thai medicinal plants selected from the Thai/Lanna Medicinal Recipe Database MANOSROI II. J Ethnopharmacol. 2011; 138(1): 92-98.
2. Manose In-house Project “The Development of Extract from Lanna Medicinal Plant Recipe for Diabetes Patients (DMTP1)” Manose Health and Beauty Research Center (www.manose.co), unpublished, 2009.
3. Navale A. and Paranjape A. Protective effect of *Anogeissus acuminata* bark extract against experimentally induced diabetic neuropathy in Wistar rats. Biochemical Pharmacology, 2017; 139, Page 116.
4. Chavan A., Paranjape A.N. and Patel K.S. Phytochemical screening and HPTLC fingerprinting of *Anogeissus acuminata* extracts. International Journal of Research in Ayurveda and Pharmacy, 2016; 7(2): 207-209.