

Specification of Thao En-On extract (Manose RM-005)

1. **Name of the raw material** : Thao En-On extract
2. **Active components** : Steroids, alkaloids and flavonoids^{(1), (2)}
3. **Scientific name of the plant / Family** : Thao En-On (*Cryptolepis buchmanani* Roem. & Schult.)/ ASCLEPIADACEAE
4. **Physical appearance of the raw material** : Dark brownish solid with specific odor
5. **pH of the raw material** : 4
6. **Standardization of the raw material** : HPLC fingerprint using cryptosin as a marker
7. **Solubility** : Soluble in water and ethanol
8. **Microbial contamination** : None
9. **Biological activities** : Anti-sprain, anti-inflammation⁽³⁾, analgesic⁽⁴⁾, chondroprotective effect⁽⁴⁾ and hepatoprotective effect⁽²⁾
10. **Safety** : No skin irritation in human volunteers
11. **Animal / human performance test** : Anti-inflammation in animals⁽³⁾
12. **Pharmaceutical, food supplement or cosmetic applications** : Topical use and cosmetics for anti-sprain and food supplement for chondroprotective and hepatoprotective effects
13. **Recommended concentrations in the product (%)** : 0.1-5 %
14. **Storage** : Keep in tight and light protection container at room temperature
15. **Precautions (if any)** : Must not use in heart disease patient and discontinue use if there is any adverse effect
16. **Cost per kg** : -

References

1. Sharma D, Sahu AN, Mujeeb M, Bharti A, Sharma A, Tripathi RK, Ashraf K. Development of Pharmacognostical profile of *Cryptolepis buchanani* Roem & Schult. International Journal of Pharmacy and Pharmaceutical Sciences 2012, 4(2): 615-618.
2. Padmalochana K, Dhana Rajan MS, Lalitha R, Sivasankari H. Evaluation of the antioxidant and hepatoprotective activity of *Cryptolepis buchanani*. Journal of Applied Pharmaceutical Science 2013, 3(2): 99-104.
3. Laupattarakasem P, Wangsrimongkol T, Surarit R, Hahnvajjanawong C. *In vitro* and *in vivo* anti-inflammatory potential of *Cryptolepis buchanani*. Journal of Ethnopharmacology 2006, 108: 349-354.
4. Hanprasertpong N, Teekachunhatean S, Chaiwongsa R, Ongchai S, Kunanusorn P, Sangdee C, Panthong A, Bunteang S, Nathasaen N, Reutakul V. Anagelsic, anti-inflammatory, and chondroprotective activities of *Cryptolepis buchanani* extract; *in vitro* and *in vivo* studies. BioMed Research International 2014, Article ID 978582.