

Daily Apple TAWA-TAWA Capsules

670 mg (325 mg *Euphorbia hirta* standardized extract)

TAWA-TAWA (*Euphorbia hirta* L.)



Tawa-tawa (*Euphorbia hirta* L.), also known by the name Asthma Weed or Snake Weed, is a pantropic herb that is greenish to reddish in color. It exudes a white latex on its stem when cut. It commonly grows in open grasslands, roadsides and pathways. Worldwide, tawa-tawa is used in traditional herbal medicine. Tawa-tawa contains triterpenes, phytosterols, tannins, polyphenols, and flavonoids. In the Philippines, tawa-tawa is the most widely used medicinal plant in the folkloric treatment of dengue. Folk wisdom regards it as a hemostatic, which may help

explain why blood platelets increase after ingestion of a boiled decoction of the plant. It is also referred to locally as gatas-gatas, because of the healing properties of its milky juice, and also for its reported effect in enhancing breast milk production.

How Tawa-Tawa Works Against Dengue and Other Viral Diseases

Numerous scientific studies done in the Philippines and tropical Asia point to the antiviral and platelet increasing activities of tawa-tawa as responsible for its anti-dengue properties. Results of in-vitro and in-vivo studies suggest that tawa-tawa is rich in phenolics and flavonoids which may help address dengue virus replication, thrombocytopenia, fever, and flu-like symptoms in dengue patients. The activation of platelets, which leads to the formation of blood clots inside the vascular system, is also associated with the severity of thrombocytopenia and vascular leakage in dengue patients.

Quercetin, one of the most abundant and bioactive compounds in Tawa-tawa, has potent antiviral property against many viral diseases and inhibits platelet activation and aggregation through several mechanisms. Among the many uses of tawa-tawa in traditional medicine aside from anti dengue, are for treating asthma and bronchitis, fever, coughs, colds, and runny noses; for stomach pains, diarrhea, and dysentery; and for increasing milk production; In children, the juice is used widely to treat mucus within the chest, inflammation of air passage, and coughs.

DAILY APPLE TAWA-TAWA CAPSULES

Daily Apple Tawa-tawa Capsules is a product of over 5 years of R&D work at Herbanext Laboratories, with funding support from the Department of Science and Technology (DOST) and the Tuklas Lunas™ Program of the Philippine Council for Health Research and Development (PCHRD). The product is the first standardized extract of a Philippine medicinal plant in the market today. The Daily Apple Tawa-tawa Capsules, which is one of several herbal-based products being assisted by DOST to become an herbal drug in the future for the complementary treatment of dengue, has been given Food Supplement

status by the Food and Drug Administration. The current product which has no approved therapeutic claim, is intended for consumers who are familiar with the health benefits of tawa-tawa and would like to use the product in a standardized dosage form instead of a decoction. Each 670 mg Daily Apple Tawa-tawa capsule, packed in bottles of 30s, contains 325 mg of extract. It is manufactured from a spray-dried aqueous extract of *Euphorbia hirta* L. that has been standardized for selected flavonoids.



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- Anti-cancer
- Cardioprotective
- Immune support
- Anti-inflammatory

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PRE-CLINICAL STUDIES

Based on an acute toxicity study conducted on male Sprague-Dawley (SD) rats at the Research Center for Natural and Applied Sciences (RCNAS) at the University of Santo Tomas, it was demonstrated that the U4bext™ spray-dried tawa-tawa extract produced using the proprietary process of Herbanext is non-toxic even at a very high dose of 10 g/kg. This is equivalent to a 60 kg person consuming around 40 capsules at one time. In a 90-day sub-chronic toxicity study of methanolic extract of tawa-tawa done in Malaysia in 2016, the herb was also found to be non-toxic at 1 gram/kg. Studies conducted at RCNAS, the U4bext™ spray-dried tawa-tawa extract produce by Herbanext was found to significantly increase platelet count in Sprague-Dawley rats within 5 days of treatment (Fig. 1). This findings agrees well with the multiple antithrombocytopenic studies conducted on tawa-tawa by researchers at RCNAS and the Institute of Pharmaceutical Sciences at the National Institute of Health from 2012-2018.

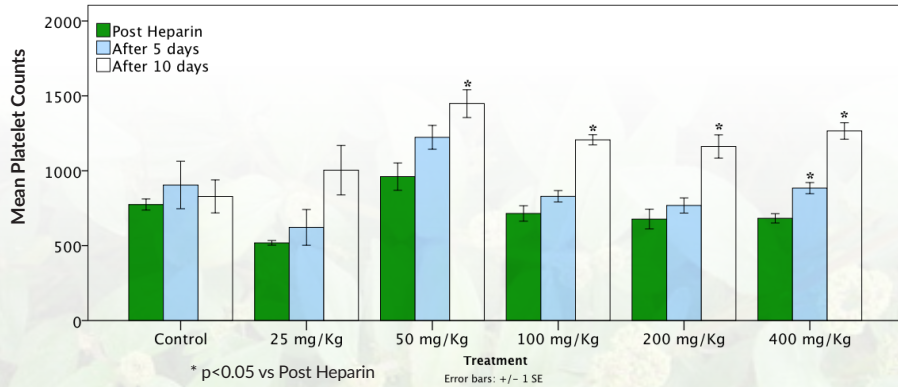


Figure 1. In vivo antithrombocytopenic activity of spray dried *E. hirta* extract in male Sprague-Dawley rats

CLINICAL STUDY

A clinical study conducted with 125 patients with confirmed dengue fever (both age groups 30–55 and 14–25) admitted within a 3 month period to the hospital Sir Ganga Ram Hospital in Lahore, Pakistan, showed that the oral treatment with herbal water of *Euphorbia hirta* had increased the platelet and total leukocyte counts after 24 hours. A significant platelet increase was also observed in the patients of 30–55 age group following the treatment with *Euphorbia hirta*. In the 14–25 age group, platelet was also observed to increase although this was not statistically significant compared with the control group. 70% patients had recovered from fever and flu-like symptoms.

GUARANTEED HIGHEST THERAPEUTIC QUALITY TAWA-TAWA IN THE MARKET!

- USES HIGH POTENCY STANDARDIZED EXTRACT
- DEVELOPED WITH DOST SUPPORT
- FDA APPROVED AND MANUFACTURED IN A GMP CERTIFIED FACILITY

Supplement Facts

Serving size: 1 Capsule (670 mg)
Servings per Container: 30

	Amount per serving	% Daily Value
Daily Apple Tawa-Tawa	325 mg	*
(Standardized for selected flavonoids)		

* % Daily Value not established

Other ingredients: gelatin capsule, cornstarch, silicone dioxide

Recommended dose or usage: Take 2 capsules 15 minutes before each meal for adults. Take a full glass of water afterwards.

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