

Burbur™



Applications

- Detoxification Support
- Antioxidant Support
- Microbial Support
- Healthy Inflammatory Response Support

Introduction

NutraMedix Burbur™ is a hydro-ethanol extract from **manayupa leaf** (*Desmodium molliculum*). *D. molliculum* is in the Fabaceae family and is native to the Peruvian Andes at 1,000–3,500 meters above sea level, though it can also be found from Mexico to Central and South America.¹ Other names for *D. molliculum* include manayupa,² muña,¹ chancas de comida,³ herba del infante (infant grass),⁴ and pie de perro or pata de perro (dog's foot).^{3,5}

Manayupa leaf (*D. molliculum*) contains polyphenols, flavonoids, flavonol glycosides, alkaloids, saponins, and tannins, along with vitamins E and K.^{2,4,6} The leaves, stems, and roots have a history of traditional use in Peru, Ecuador, and Columbia,⁷ including detoxification support, liver support, urogenital support, respiratory support, skin support, and healthy inflammatory-response support.^{3,6-8}

NutraMedix Burbur is made at our U.S. manufacturing facility using a specialized proprietary extraction process that optimizes the constituents of the herbs in their original, unprocessed state to obtain broad-spectrum concentration. Because our extracts are made in our own facility, we control all aspects of quality, including stringent ID testing, microbial testing, and heavy-metal testing. NutraMedix rigorously follows current good manufacturing practices (cGMP), as do our suppliers.

Detoxification Support

Manayupa leaf (*D. molliculum*) supports the body's natural detoxification systems and promotes liver health, as found in a rat study using an aqueous extract of the leaf and stem.⁷ Compared to the placebo, manayupa leaf helped maintain gamma-glutamyltransferase (GGT), aspartate aminotransferase (AST), and alanine aminotransferase (ALT) already within the normal range.⁹ Other animal studies have shown that manayupa leaf helps maintain levels of AST, ALT, alkaline phosphatase (ALP), and total bilirubin already within the normal range, maintaining hepatic tissue health.⁷

In a high-dose study with rats, a hydroalcoholic extract of manayupa leaf showed hepatoprotective support that was comparable to silymarin from milk thistle (*Silybum marianum*).¹⁰ This liver support is attributed to the flavonoid schaftoside, which helps maintain eicosanoid production already within the normal range.⁷

Antioxidant Support

Manayupa leaf (*D. molliculum*) may help with antioxidant support,¹¹ attributed in part to the constituent D-pinitol.⁷

Flavonoids in manayupa leaf have been verified by thin-layer chromatography (TLC). Phenolic content has been verified by the Folin-Ciocalteu

test, and antioxidant activity has been measured by 2,2-diphenyl-1-picrylhydrazyl (DPPH) assay.⁴ A methanolic extract of manayupa leaf showed significant antioxidant support as quantified by DPPH assay.¹²

Healthy Inflammatory Response Support

Studies show that **manayupa leaf** (*D. molliculum*) supports a healthy inflammatory response by maintaining levels of cyclooxygenase-2 (COX-2), tumor necrosis factor-alpha (TNF-alpha), interleukin 1-beta (IL-1-beta), and interleukin-6 (IL-6) already within the normal range.⁷

In a rat study using a hydroalcoholic leaf extract, the healthy inflammatory-response support was superior to placebo and comparable to the positive control.¹³ In a mouse study, inflammatory-response support was attributed to the low molecular-weight polyphenol flavonoid compounds, and the extract helped maintain Th2 lymphocytes and eosinophils as well as interleukin-4 (IL-4), interleukin-5 (IL-5), interleukin-8 (IL-8) and Immunoglobulin E (IgE) levels already within the normal range.¹⁴

In a human study, participants included 150 women ages 18–45. The treatment group was given manayupa leaf tea twice per day for five days—three days before menstruation and then the first two days of menstruation. The control group was given a positive control. At the end of the three-month study, compared to baseline, manayupa leaf helped maintain levels of cyclooxygenase, IL-6, and TNF-alpha already within the normal range, supporting more comfortable menstruation.¹⁵

Microbial Support

Manayupa leaf (*D. molliculum*) may help with microbial support.¹⁶⁻²² In a laboratory study comparing the effects of an ethanolic leaf extract to both positive and negative controls, manayupa leaf showed significant and dose-dependent microbial support.¹⁷

Other laboratory studies using the ethanolic extract of manayupa leaf and stem showed dose-dependent microbial support, with the stem extract comparable to the positive control.¹⁸ The ethanolic leaf extract and hydroalcoholic aerial-parts extract showed microbial support, with the aerial-parts extract comparable to the positive control.^{19,20}

Safety and Cautions

Manayupa leaf (*D. molliculum*) was determined to be non-toxic in a mouse study that followed the Organization for Economic Cooperation and Development (OECD) 423 test guidelines.²³ In another mouse study, there were no signs of toxicity in doses of up to 2,000 mg/kg of leaf and stem aqueous extract for 14 days.²⁴ In an acute toxicity study with rats, a single dose of 2,000 mg/kg of hydroalcoholic extract led to drowsiness and mild sedation without signs of toxicity.²⁵

There have been two reports of adverse effects in humans who used manayupa leaf. One event involved a severe skin rash in a 72-year-old female, and the other involved mild dizziness and confusion in a 62-year-old female.²⁶

Very high doses of manayupa leaf may have contraceptive effects.²⁷ In a study using an ethanolic extract of manayupa leaf, rats were divided into four groups, receiving either distilled water, 200 mg/kg of ethanolic extract, 600 mg/kg of ethanolic extract, or a positive control. At the end of the experimental period, there were significant and dose-dependent differences in pregnancy rates in the manayupa leaf groups compared to the control group.²⁷

The average human dose of Burbur is 40 drops or 1.2 ml dissolved in water, which is approximately 0.000166 mg/kg of body weight.²³

Safety is not documented in breastfeeding or pregnant women, or in children under age 3, due to insufficient safety research.

*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to treat, cure, or prevent any diseases.

References

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NutraMedix

SHAKE WELL BEFORE EACH USE:
Put 10 drops in 4 oz (120mL) of water and wait one minute before drinking. May be taken several times per day, or for maximum support every 15 minutes, or as directed by your physician. Stop use if adverse reactions develop. Keep out of reach of children.

†This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

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DETOX SUPPORT †

Dietary Supplement

1 fl oz. (30mL)

Supplement Facts

Serving Size 10 drops
Servings Per Container 60

Amount Per Serving	
<i>Desmodium moliculum</i> leaf extract	0.5 mL*
*Daily Value not established	

Other ingredients: mineral water, ethanol (20-24%)

NutraMedix

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