

APPLICATIONS

- Microbial Support
- Immune System Support
- Inflammatory Response Support
- Gastrointestinal Support



INTRODUCTION

Houttuynia is a hydro-ethanol extract from *Houttuynia cordata* leaf, which is in the Saururaceae family. It is known as *yu xing cao* in traditional Chinese health practices and is found throughout Southeast Asia. Constituents include volatile oils such as alpha-pinene, d-limonene, citronellol, carvacrol, and thymol;¹ flavonoids such as quercetin, quercitrin, isoquercitrin, and rutin;² organic acids such as chlorogenic acid, palmitic acid, and linoleic acid;² phytosterols such as stigmasterol and beta-sitosterol;² and water-soluble polysaccharides.³ *H. cordata* also contains houttuynoside A and houttuynamide A, in addition to amino acids, vitamins, and trace minerals.^{3,4,5}

Houttuynia 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.

MICROBIAL SUPPORT

H. cordata may help with both intracellular and extracellular microbial support. *H. cordata* may help with microbial support for diverse strains with dose-dependent zone diameters of inhibition,⁶ and may also help with microbial support for a variety of morphological forms.⁷ Additionally, it may provide microbial support for smaller intracellular microbes and help to maintain normal

host immunity.^{8,9} In addition to intracellular microbial support, *H. cordata* may help to support relevant respiratory and intestinal mucosa through maintaining cytokines/chemokines, secretory IgA (sIgA), zonula occludens-1 (ZO-1)/tight junction protein, TLR4, and NF-kappaB already within the normal range.¹⁰ *H. cordata* may help to maintain a healthy gut-lung axis.¹⁰ Additionally, it may help to support healthy gingival epithelium as well as balanced oral microbiota, including mycelial support.⁷

IMMUNE SYSTEM SUPPORT

H. cordata may help with immune system support through helping to maintain healthy levels of CD4⁺ and CD8⁺ T cells that are already within the normal range.¹¹ It may help to support the innate immune response by maintaining levels of reactive nitrogen intermediates (RNI), such as nitric oxide (NO), and reactive oxygen intermediates (ROI), such as superoxide, that are already within the normal range. It may also help to support the morphological change of macrophages from the round form to the dendritic form, supporting normal phagocytic activity as well as normal NO production.¹² *H. cordata* may assist with immune system support through the maintenance of a healthy Th1/Th2 ratio, in addition to the maintenance of Th2-dependent cytokines IL-4 and IL-5 already within the normal range.¹³ Additionally, it may help with IgE-mediated immune support by maintaining IL-4, TNF-alpha, and NF-kappaB already within the normal range.¹⁴ *H. cordata* may help to maintain MIP-1-alpha, MIP-1-beta, and RANTES already within the normal range in human peripheral blood mononuclear cells (PBMCs).¹⁵ It may also help to support health through its effect on the complement cascade.^{16,17}

OTHER USES

Inflammatory Response Support

H. cordata may help with antioxidant support and healthy inflammatory response support.¹⁸ It may help to support healthy function of the NF-kappaB and MAPK pathways and may help to maintain cytokine levels already within the normal range.¹⁸ It may also help to maintain levels of TNF-alpha, NO, IL-6, IL-8 and PGE2 already within the normal range.^{19,20} The constituent houttuynamide A (becatamide) may additionally help to maintain levels of COX-1 and COX-2 already within the normal range.^{21,22} In traditional Chinese health practices, *H. cordata* is used to clear heat.^{1,2}

Gastrointestinal Support


H. cordata may help to maintain intestinal homeostasis through the support of healthy gut microbiota.²³ It may help to support relaxation of intestinal smooth muscle as well as normal transit time, and may help to maintain the expression of CD54 (ICAM-1) of colonic mucous membrane already within the normal range.²⁴ *H. cordata* may help to maintain the balance of Th17/Treg cells in gut-associated lymphoid tissue (GALT).²⁵ It may also help to support healthy intestinal mucosa.¹⁰

SAFETY AND CAUTIONS

There are no known contraindications to the use of this herb. *H. cordata* has been used for centuries in Chinese Medicine, with the first known mention in *Ming Yi Za Zhu (Miscellaneous Records of Famous Physicians)* by Tao Hong-Jing in 500 CE.¹ In laboratory animals, oral administration of 16 mg/kg was found to be non-toxic.¹¹ In vitro and mouse studies have shown no evidence of genotoxicity or other toxicity,^{11,18,26} and the herb is considered a safe and edible plant.²⁴


Safety not documented in breastfeeding or pregnant women, or in children under 3 years of age 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.**

NutraMedix 

SHAKE WELL BEFORE EACH USE:
Put 1 to 30 drops in 4 oz (120 mL) of water and wait one minute before drinking. Start with 1 drop (30 min. before meals) increasing slowly up to 30 drops 2-4 times per day or as directed by your physician. Do not use if pregnant or nursing. Stop use if adverse reactions develop. Keep out of reach of children.

These statements have 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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HOUTTUYNIA

IMMUNE/MICROBIAL SUPPORT[†]

Dietary Supplement

1 fl oz. (30mL)


Supplement Facts

Serving Size 30 drops
Servings Per Container 20

Amount Per Serving	
Houttuynia herb extract	1.5 mL

*Daily Value not established

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

NutraMedix 

Jupiter, Florida 33458 USA
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561-745-2917

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Lot #
Exp.

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