

APPLICATIONS

- Inflammatory Response Support
- Antioxidant Support
- Gastrointestinal Support
- Microbial Support
- Neurological Support



INTRODUCTION

Mora™ is a hydro-ethanol extract made from *Achillea millefolium* (flowers), *Rubus fruticosus* (leaves) and *Calicophyllum spruceanum* (bark).

A. millefolium belongs to the Asteraceae/Compositae family and is commonly known as yarrow. Synonyms for *A. millefolium* include *A. borealis*, *A. magna*, and *A. lanulosa*.¹ *A. millefolium* includes phenolic acids such as gallic acid, 2-OH-benzoic acid, chlorogenic acid, vanillic acid, caffeic acid, syringic acid, p-coumaric acid, sinapic acid, ferulic acid, and cinnamic acid. It also includes flavonoid aglycones and glycosides such as myricetin, luteolin, kaempferol, rutin, and hyperoside.² *A. millefolium* has been used traditionally for gastrointestinal support.³

R. fruticosus belongs to the Rosaceae family and is commonly known as blackberry. Synonyms for *R. fruticosus* include *R. plicatus*, *R. affinis*, *R. canadensis*, *R. millspaughii*, and *R. laciniatus*.⁴ *R. fruticosus* leaves have been traditionally used for microbial support.⁵ The leaves contain phenolic acids such as neo-chlorogenic acid, caffeic acid, gallic acid, p-coumaric acid, and ellagic acid; flavonols such as quercetin, quercetin-3-O-galactoside, quercetin-3-O-glucuronide, and kaempferol; flavan-3-ols such as catechin, epicatechin, and epicatechin gallate methyl gallate; ellagitannins such as sanguin H-6/lambertianin C, and casuarinin; anthocyanins such as cyanidin-3-O-glucoside; and triterpene acids such as rubinic acid and rubusic acid.^{6,7} They also contain tannins, villosin, gallic acid, and iron.⁵

C. spruceanum belongs to the Rubiaceae family and is commonly known as capirona.⁸ A synonym for this plant is *Eukylista spruceana*.⁹ It is native to the Amazon rainforest and is sometimes called the “Tree of Youth.”¹⁰ It has been used in traditional medicine for healthy inflammatory response support.¹¹ Constituents of *C. spruceanum* include seco-iridoids 6'-O-acetyldiderroside, 7-methoxydiderroside, 8-O-tigloyldiderroside, kingside, secoxyloganin, and diderroside, as well as iridoids loganin and loganetin.¹² Others constituents

include gardenoside, cyanidin, 5-hydroxymorin, 5-hydroxy-6-methoxycoumarin-7-glucoside, and taxifolin.¹⁰

Mora is made at our U.S. manufacturing facility and 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.

INFLAMMATORY RESPONSE SUPPORT

A. millefolium may provide inflammatory support through the maintenance of cytokines such as iNOS, COX-2, and IL-6 already within the normal range, as shown in preclinical studies.¹³ It may also provide inflammatory support through the maintenance of human neutrophil elastase already within the normal range.¹³ In mice, *A. millefolium* helped to support normal dermal thickness and to maintain IgE levels already within the normal range.¹³ Additionally, it may help to support normal filaggrin expression already within the normal range.¹³ The healthy inflammatory response support from *A. millefolium* is partly attributed to its phenolic compounds, particularly apigenin, luteolin, and dicaffeoylquinic acids.¹⁴ Apigenin may help to maintain IL-6, IL-8, and prostaglandin synthesis already within the normal range.¹⁵ *R. fruticosus* leaves contain cyanidin-3-O-glucoside which may help with healthy inflammatory response support by way of TNF-alpha and COX-2 inhibition.¹⁷

ANTIOXIDANT SUPPORT

A. millefolium may provide antioxidant support, as quantified by DPPH assay,¹⁶ which is attributed to its phenolic compounds.¹⁷ *R. fruticosus* may also assist with antioxidant support.^{18,19} The phenolic content of *R. fruticosus* has been determined spectrophotometrically, and the free radical scavenging capacity was determined via DPPH assay.¹⁸ The constituent cyanidin-3-O-glucoside may provide particularly robust antioxidant support.¹⁷ *C. spruceanum* may also help with antioxidant support, as quantified by DPPH, ABTS, singlet oxygen, superoxide anion radical, and beta-carotene bleaching methods.^{10,11} In vivo antioxidant support was seen in *Caenorhabditis elegans* (*C. elegans*).¹⁰

GASTROINTESTINAL SUPPORT

A. millefolium may help with gastrointestinal support.²⁰ It may help to support and maintain healthy gastrointestinal mucosa,²¹ attributed to antioxidant activity as measured by glutathione (GSH) and superoxide dismutase (SOD) levels in rats.²² It may help to support intestinal smooth muscle relaxation,²⁰ attributed to the flavonoid content,³ and may also help to support hepatobiliary health, attributed to choleric support from the dicaffeoylquinic acids.³ Additionally, it may help to support normal gastric emptying, attributed to the constituent choline.²³ Ellagitannins from *R. fruticosus* may help to support healthy gastrointestinal mucosa through maintaining NF-kappaB already within the normal range.²⁴

OTHER USES

Microbial Support

A. millefolium may help with microbial support,²⁵ and may help with mycelial support.²⁵ *R. fruticosus* may also help with microbial support.²⁶ The most robust microbial support occurs with the hydro-alcoholic leaf extract, as quantified by a 6-11 mm zone of inhibition.²⁶

Neurological Support

A. millefolium may help to support a calm, healthy mood, the mechanism of which is not yet understood, though it is known to be independent of GABA receptor action.^{27,28} *R. fruticosus* may also help to support a calm, healthy mood.²⁹

SAFETY AND CAUTIONS

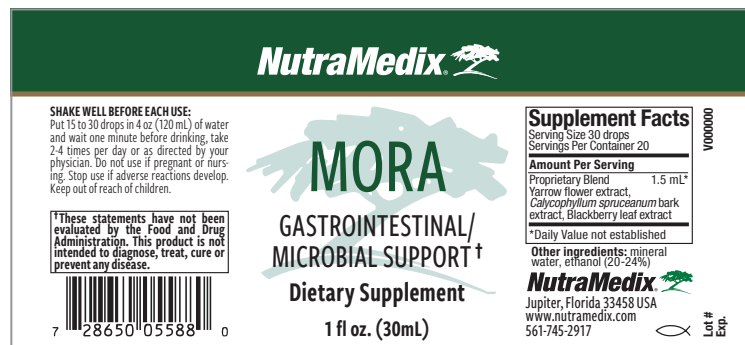
Oral consumption of *A. millefolium* is generally well tolerated. There have been reports of urticaria or atopic dermatitis from topical exposure, which is generally attributed to the presence of sesquiterpene lactones.³⁰ Large amounts may cause diuretic effects.³¹ As *A. millefolium* may support diuresis, lithium dosage needs to be closely monitored and may need to be lowered.¹ *A. millefolium* may cause allergic reactions in those with allergies to other plants in the Asteraceae/Compositae family, such as ragweed.³² It may also have mild estrogenic effects.³³ *A. millefolium* is contraindicated in pregnancy.¹

R. fruticosus is generally well tolerated. There is little information available on potential side effects. Insufficient data is available to determine the safety of *R. fruticosus* leaf in pregnancy.^{*4}

Data is currently limited for *C. spruceanum*, which has shown no evidence of toxicity in mice.³⁴

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 15 to 30 drops in 4 oz (120 mL) of water and wait one minute before drinking, take 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.

MORA
GASTROINTESTINAL/
MICROBIAL SUPPORT[†]
Dietary Supplement
1 fl oz. (30mL)

Supplement Facts
Serving Size 30 drops
Servings Per Container 20

Amount Per Serving	
Proprietary Blend	1.5 mL [†]
Yarrow flower extract	
Calycophyllum spruceanum bark extract	
Blackberry leaf extract	

[†]Daily Value not established
Other ingredients: mineral water, ethanol (20-24%)

NutraMedix
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Lot #
Exp.

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