

Complex containing guava leaf extract Bendu-381

Certified ingredient for health functional food by the Korea Ministry of Food and Drug Safety.

Patent No. 0834850: Anti-allergic rhinitis, anti-atopic dermatitis

or a complex herbal composition having an anti-chronic asthma effect

"It helps to improve nasal conditions (runny nose, nose itching, sneezing) caused by hypersensitivity reactions."

Psidium guajava
Guava



Camellia sinensis
Green Tea



Rosa spp
Rose



Major ingredients and recommendations

- *Psidium Guajava* Leaf Extract, *Camellia Sinensis* Leaf Extract, *Rosa Centifolia* Flower Extract
- Capsules, tablets, gummi/jelly, gel, granules, etc. can be manufactured (800 mg/day, yellowish-brown powder)

Specialty of product

- It inhibits allergic reactions and inflammation caused by allergens such as house mites, mold spores and pollen.
- It calms allergic reactions by stabilizing mast cells and inhibiting histamine release.
- It has a strong anti-inflammatory effect through inhibiting the production and secretion of inflammatory factors (IL-1 β , IL-6, TNF- α , etc.) by macrophages.
- As a result of clinical test, it showed an excellent effect in **alleviating the symptoms of allergic rhinitis** (nose itching, sneezing, runny nose).

About the Product

- In 2009, for the first time in Korea, certified by the Korea Ministry of Food and Drug Safety as a health functional food ingredient for **"improving nasal passages due to hypersensitivity reactions"**
- It can be safely taken **with 100% natural substances**, and unlike antihistamines, there is no drowsiness or rebound phenomenon. Immune tolerance to allergens allows the patient to slowly recover from allergic disease.
- It inhibits passive skin anaphylaxis (PCA) in a concentration-dependent manner, and is expected to be effective in atopic dermatitis and urticaria.
- If taken for a long time, the effect of **suppressing postprandial blood glucose elevation** is expected. (Guava leaf extract is a notified ingredient for health functional food that can help suppress postprandial blood glucose elevation)
- As a result of the clinical test, there was a significant effect on runny nose, sneezing, and itchy nose ? nasal itchiness? after 4 weeks of ingestion (80 subjects, Department of Pulmonary, Allergy & Critical Care Medicine, Hallym University Sacred Heart Hospital)



List of related papers

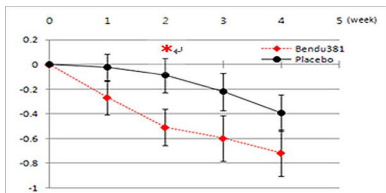
- Anti-Inflammatory Effects of BENDU381 in Lipopolysaccharide Stimulated RAW264.7 Cells. (2020) J. Korean Soc. Food Sci. Nutr. 48(11), 1202-1211.
: It can be usefully used as a natural **anti-inflammatory ingredient** by inhibiting the expression of inflammatory cytokines and related enzymes.
- The Effects of Extracts from Green Tea, Guajava Leaves and Rose Petals on Allergic Rhinitis: A Randomized Double Blind Control Study. (2009) Korean J. Asthma Allergy clin. immunol. 29(2), 89-95.
: It effectively inhibits mast cell degranulation and histamine secretion by **stabilizing mast cells**, which play an important role in allergic rhinitis.
- Effect of phyto-extract mixture (PEM381) on Experimental atopic dermatitis. (2013) J. Nat. Sci. Res. 27(1), 73-78
: It relieves **atopic dermatitis** by inhibiting NO synthesis, one of the inflammatory mediators
- Inhibitory Effects of Phyto-Extract Mixture (PEM381) on Type I Allergic Reaction. (2007) J. Korean Soc. Food Sci. Nutr. 36(2), 155-162.
: It is effective in the treatment of allergic_rhinitis and atopic dermatitis by **inhibiting 5-lipoxygenase and histamine secretion**
- Effects of Phyto-Extract Mixture (PEM381) in Type I Allergic Reaction-Induced Mice. (2007) J. Korean Soc. Food Sci. Nutr. 36(11), 1377-1384.
: It **Inhibits of leukotriene synthesis and histamine secretion** in animal model of type I allergy

Certificate of individual authorized health functional food

구분	내용
원료명	구아바잎추출물 등 복합물
함재료	구아바잎, 장미꽃잎
제조방법	
제조기준	1) BHA의 함량(mg/kg) : 2.0-3.7 2) EDC의 함량(mg/kg) : 10.0-15.0 3) GABA의 함량(mg/kg) : 2.0-3.2 4) 당질 : 10.0 이하 5) 단백질 : 2.0 이하 6) 총수분(mg/kg) : 2.0 이하 7) 총수분(mg/kg) : 1.0 이하 8) 구아바잎(mg/kg) : 10.00 이하 9) 대장균군 : 음성
기능성내용	"비만증에 의한 고 콜레스테롤(지방, 콜레스테롤)의 생체 농도를 감소 시키는 것"을 의미
유효성분	"구아바잎추출물 등 복합물"로서 500 mg/일
유효성분	유효성분
기타 사항	기타 사항

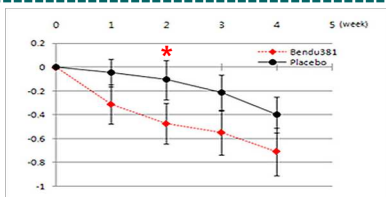
- Ben's Lab Co., Ltd.
- Certification number: 2009-16
- Ingredients: Complex containing guava leaf extract
- content: It may help improve nasal conditions (nose itching, sneezing, runny nose) caused by hypersensitivity reactions.

Clinical test of Bendu-381



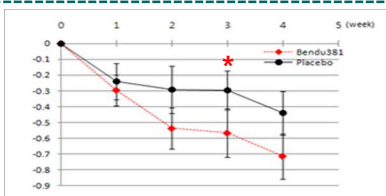
Runny nose

- Significant improvement at **2 weeks of intake**



Sneeze

- Significant improvement at **2 weeks of intake**



Nose itching

- Significant improvement at **3 weeks of intake**

