

The extractives of  
**Bamboo Grass**  
Chishimazasa  
(*Sasa Kurilensis*)



Manufactured by Nippon Haruma Co.,Ltd

Distributed by CBC (EUROPE)LTD

Nova Milanese (MI)

Tel.0362-365079



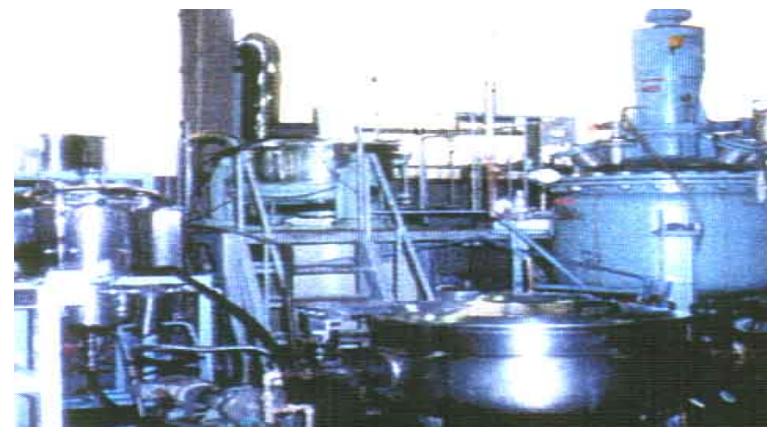
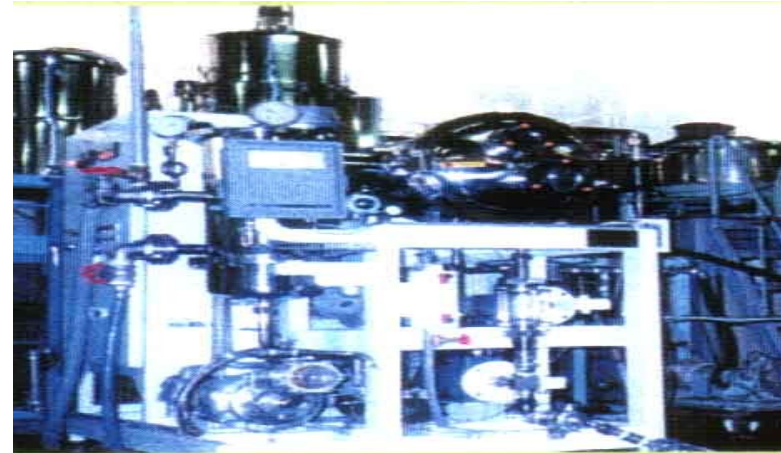
## Scientific proof of Chishimazasa with mysterious effect

- Chishimazasa has been taken to our life as a plant with many effects long ago.
- The company clarifies a mysterious charm and effects by scientific manners, and develops the extraction method to utilize all effective ingredients in Chishimazasa.
- The company use the raw material that is harvested at national forest in Mt.Hakkoda's mountain food area without any enviromental pollution.
- The application of extractives varies so many,
  - Functional Foods
  - Cosmetics
  - Skin treatment
  - Medical products
- And will be expected more in future.



## Low temperature High pressure compression extraction method

- The low temperature high pressure compression extraction method is available to take out all ingredients by without any changes.
- The method is patented under the No.2002407.
- In all the process of extraction, neither water and chemicals are used.
- The method is available to extract and keep a quality of amino acid at least, though the other method by both hot water and alcohol extractions are not available.



## The leaf and the stalk of Chishimazasa of natural growth at Mt.Hakkoda

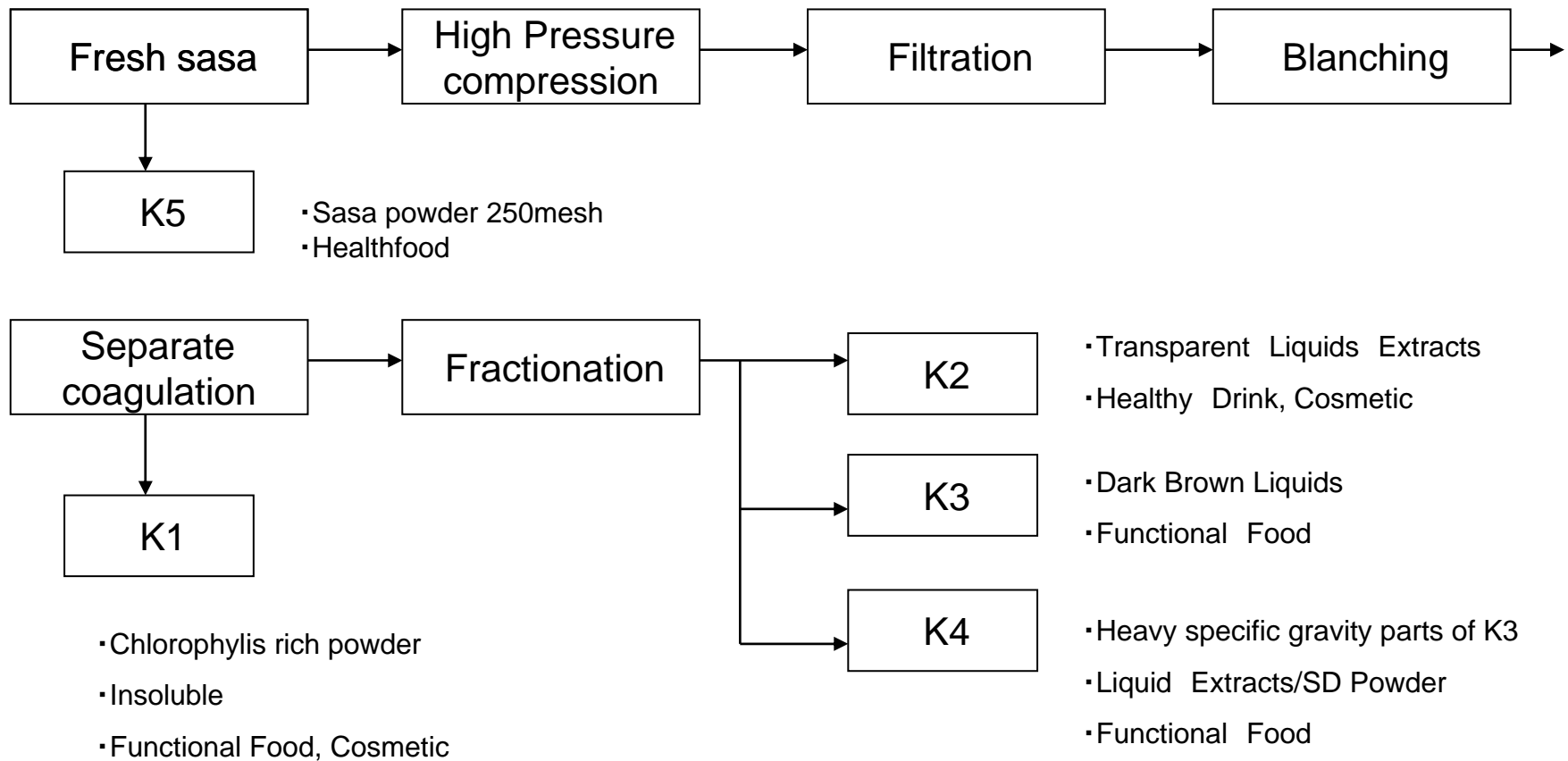
- Even if it is the same kind of bamboo grass, it is important that the colony soil is extremely natural.
- Wild bamboo grass growing up at a beechen virgin forest in Mt.Hakkoda/Aomori Pref. is our raw material.
- In the early and mid summer harvest, bamboo grass is very active and is used as best raw material.
- Not only leaf is used, but also the stalk is used that contains the useful ingredients.

## Active ingredients

Analysis Item	Results	Analysis Method	Main Function
Soluble Polysaccharide	1.40%	Gel Filtration Method	Immune promotion
Total Chlorophyll	0.3mg/100g	Spectrophotometer	Chlorophyll, Blood
Amino Acid(18 kinds)	357mg/100g	Automatic Analysis	Protein
Lignin	0.24%	P.J.Van Soest	Anti-tumor
Tannin	0.11%	Folin-Denis Method	Anti-inflammation
Total Carotenes(Vit A effect)	0.12mg/100g	Spectrophotometer	Immune promotion
Riboflavins(Vit B12)	0.03mg/100g	Lmifrabin Spectrophotofluorometer	Metabolism, Anti-inflammation
Pantothenic Acid(Vit B5)	0.56mg/100g	Microbioassay	Detoxication
Vitamin B6	0.28mg/100g	Microbioassay	Metabolism
Vitamin B12	0.06 $\mu$ g/100g	Microbioassay	Blood, Skin, immunity
Total Ascorbic Acid	14mg/100g	Hydrazine Spectrophotometer	Collagen, Scavenge active oxygen
Zinc	7.04ppm	Atomic Absorption	Protein, DNA synthesis
Iron	1.88mg/100g	Rorfenantorphosphorescence	Hemoglobin
Calcium	7.2mg/100g	Atomic Absorption	Enzyme, hormon
Sodium	5.54mg/100g	Atomic Absorption	Cell osmotic pressure
Potassium	257mg/100g	Atomic Absorption	Relation with Sodium
Magnesium	17.2mg/100g	Atomic Absorption	Cell structure
Foloic Acid	3 $\mu$ g/100g	Microbioassay	Metabolism

# Production of Chishimasasa extracts

## Process & Application



## The list of applied products



K2



K2



K3



# New functions of extracts

- Deodorant for Body odor, foul breath
- Skin care for Atopy, Dermatitis (Picture 1)
- Protecting liver by Alcoholic fatty liver (Picture 2)
- Prevent Helicobacter Pylori

Picture 1



Before



After

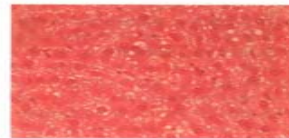
Picture 2



0: Normal



1: Fatty liver with small droplets



2: Fatty liver with large droplets