



PRODUCT INFO  
& DATASHEET

## SICO-BRASS

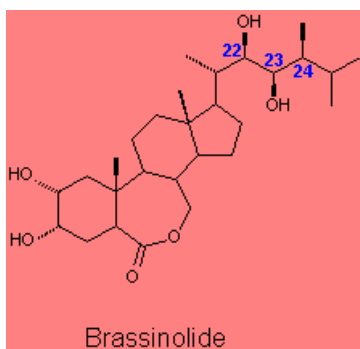
*Natural Brassinolide: promotes growth and high yields for your crops.*

8/06/2017

### **1. What are the Notable Functions of natural brassinolide:**

- 1) Seeds treatment: increases seeds germination, improves seeds vigor.
- 2) Promotes growth, increases yield.
- 3) Promotes buds formation, keeps flowers, keeps fruit setting, promotes fruit enlargement.
- 4) Improves fruit taste, improves good coloring of fruits, good shape.
- 5) Increasing rice tillering (shooting), increases grain filling and grains weight.
- 6) Improves the crops' ability of cold resistance and drought resistance.
- 7) Improves the crops' resistance to disease
- 8) Relieves the harmful stress from chemical herbicides.

### **2. What is SICO-BRASS natural brassinolide (Brassinosteroids)?**



#### Molecular structure

Brassinosteroids (Natural brassinolide) represent a class of plant hormones with high-growth promoting activity and found in pollen, anthers, seeds, leaves, stems, roots, flowers, grain, and young vegetative tissues in the plant kingdom, particularly have high content in pollen. In China, Rape pollen is very rich and cheap. We have established an effective method to extract BR from rape pollen, obtained a great deal of by-products protein & Polysaccharide (about 60%), the by-products can be used in health food that can greatly reduce the production costs of brassinosteroids. This approach allowed to realise the industrialization of natural brassinosteroids.

### **3. Where is natural brassinolide from?**



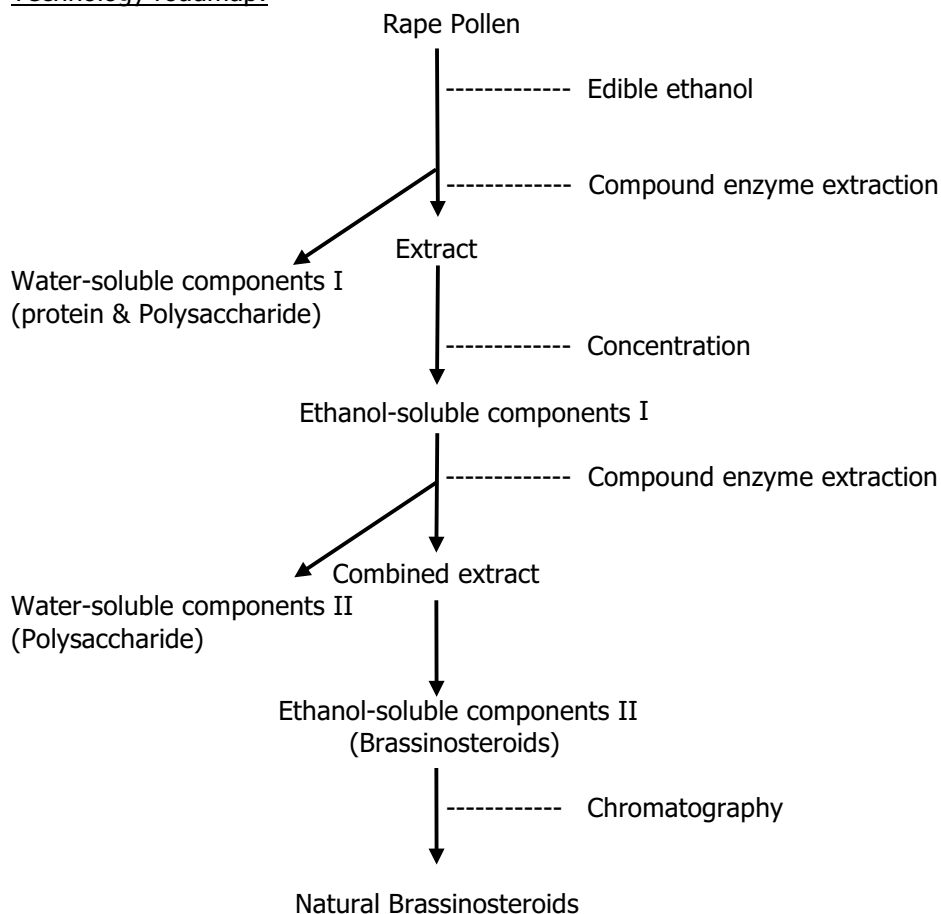
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EVERY TIME THE RIGHT SOLUTION



Extracted method for Industrialization of Natural Brassinolide from Rape Pollen (brassic flower pollens)  
Technology roadmap:



**4. Mode of action of SICO-BRASS natural brassinolide:**

Physiological effects of natural brassinolids on plants	
Cell level	Whole plant level
Effect on the protein spectrum and on the amino acid composition of proteins	Effect on the content of nutritive components and fruit quality improvement, the dry matter increase.
Promotes the content of chlorophyll, Promotes the photosynthesis production, hence enhances the carbohydrate biosynthesis in plant, sugar content is increased	Effect on the content of dry matter, carbohydrate, sugar, vitamins. Total dry matter increase.
Stimulation of elongation and fission	Growth promotion
Effect on hormonal balance	Increase in the success of fertilization .
Effect on enzyme activity; H <sup>+</sup> -pump activation	Shortening the period of vegetative growth.
Activation of protein and nuclear acid synthesis	Size and quantity of fruits increase
Effect on the fatty acid composition and on the properties of membranes	Increases resistance to unfavorable environmental factors, stress and diseases, enhances the storage of fruits.
Enhances the photosynthetic capacity and translocation of products	Quality and yield increase
Enhances the activity of SOD in the leaves of plants. Promotes more ions of H <sup>+</sup> released from the leaves which can minimize osmosis of cell membrane and protect the cell membrane	Enhances the defense system and the immunity of the plant, enhances the storage of fruits.

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## **5. Specifications of SICO-BRASS Natural brassinolide:**

- 1) 60%-90% TC.
- 2) 1-2% TC.
- 3) 0.2% SP.; 0.1%SP; 0.01%SP.; 0.0075%SL.;

## **6. Why use more SICO-BRASS natural brassinolide ?**

### a) Easy to use for farmers:

- Fully water soluble and by foliar spraying.
- Mix together with other products to spray: mix with herbicides, fungicides or insecticides, foliar fertilizers to spray on crops.

b) Using SICO-BRASS natural brassinolide as a safener: when mixing with herbicides, insecticides, fungicides to spray to crops, it can relieve and reduce the chemicals stress on crops: for example: when you use chemical herbicides, insecticides, fungicides, there will be a chemical harmful stress to crops and the crop will be weaker and leaves will become yellow or change. So you can use our SICO-BRASS natural brassinolide mix with herbicides, insecticides, fungicides to spray on crops, and there will be no & less chemical harm and stress, because our natural brassinolide will help crops to grow stronger and relieve the stress.

### c) Using SICO-BRASS natural brassinolide preparation & formulation with (SICOGREEN) foliar fertilizers :

If you use foliar fertilizer, trace-elements, nutrition fertilizers, you can formulate them together with SICO-BRASS natural brassinolide. This makes your fertilizer stronger and more effective.

How to make formulation together ? You know the natural brassinolide dosage, and the fertilizer dosage, and then you can calculate out the dose to mix together.

### d) Using SICO-BRASS natural brassinolide to seeds treatment, seeds coating.

## **6. Additional info**

- Min. trial order quantity = 100 kg
- Product has ECOCERT organic certificate. For each batch a HPLC analysis result is given.
- Presently exported to > 30 countries with very good results and customer satisfaction.