



Chico Crop Science Co., Ltd.

Company Profile:

Chico Crop Science Co., Ltd. is a high agro-tech company specialized in providing comprehensive nutrition for crops, seed treatment and systematic prevention and control of crop diseases, pests and weeds.

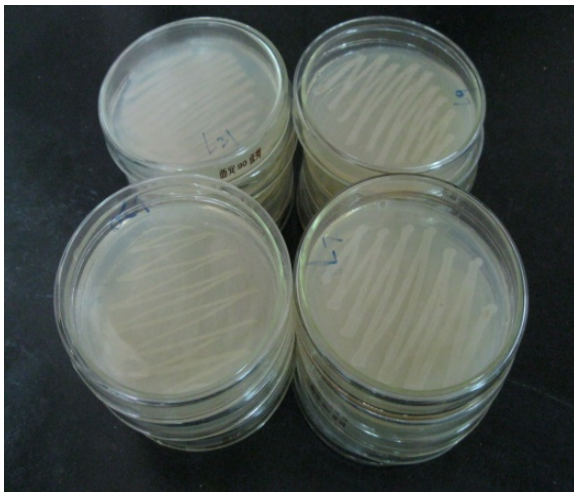




Carer™

Q: Is there a product **safe**, **fast effective**, and **no resistant** to **bacterial disease**?

A: There's no doubt that **Carer™** can do it.





Carer™

CATALOG

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Biological control bacterial diseases
BIOLOGICAL CONTROL BACTERIAL DISEASES





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1.Introduction

Carer™ is Chinese National Invention Patent product. Aiming to prevent and control bacterial diseases of plants in green way, After years of efforts, a new generation bio fungicide "Carer™" has been developed by our close cooperation with Plant Pathology and Plant Protection Scientist.

Carer™ has a strong prevention and control effect on **Bacterial Shot-hole, Bacterial wilt,Black shank,soft rot, Blast disease,Angular leaf spot, Blossom Blight, Gray Mold,Canker**. It can also fix nitrogen, release insoluble minerals, produce plant nutrients and hormones (auxin, gibberellin, kinetin) to promote crop growth.





2. Current situation of bacterial diseases

- In recent years, with the development of agriculture, people find that it's much more difficult to manage bacterial diseases than ever.
- Bacterial diseases lead to serious damage in more and more varieties of crops worldwide.
- Bacterial pathogen cause diseases like Rice Bacterial Leaf Streak, Bacterial Angular Leaf Spot, Potatoes Bacterial wilt, Black shank, soft rot, Citrus Scab, Kiwi Blossom Blight, etc.
- **The biggest harm of bacterial diseases is to reduce crop yields. cause the economic loss of growers directly. The global potato production is reduced by about 25% due to bacterial diseases, the Rice production is generally reduced by 10%~20% ,and the yield loss can reach to 50% high in severe cases.**



Citru Scab



Potatoe Scab

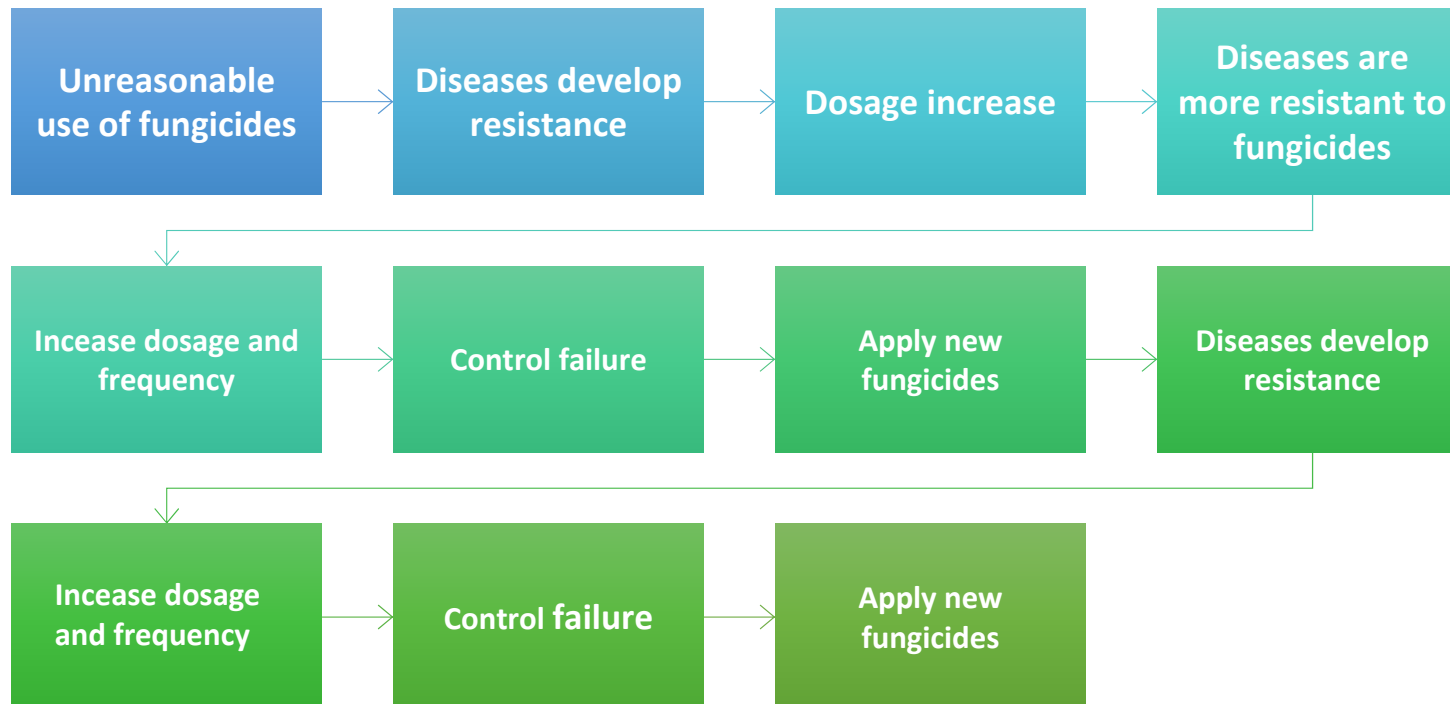


Rice Bacterial Leaf Streak



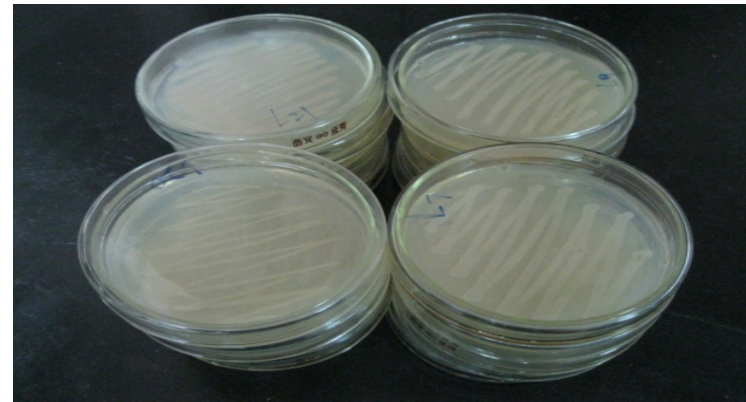
2. Current prevention methods

Prevent and control by **Chemical Fungicide**





3. Isolate and screen out Carer™ strain

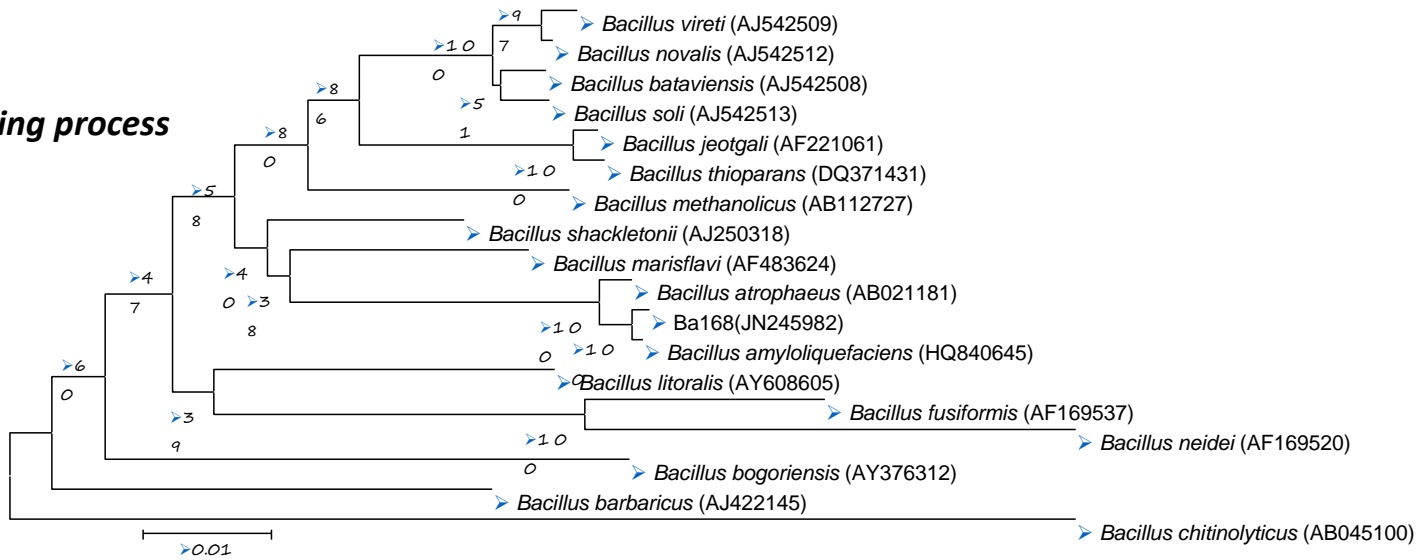




3. Isolate and screen out Carer™ strain

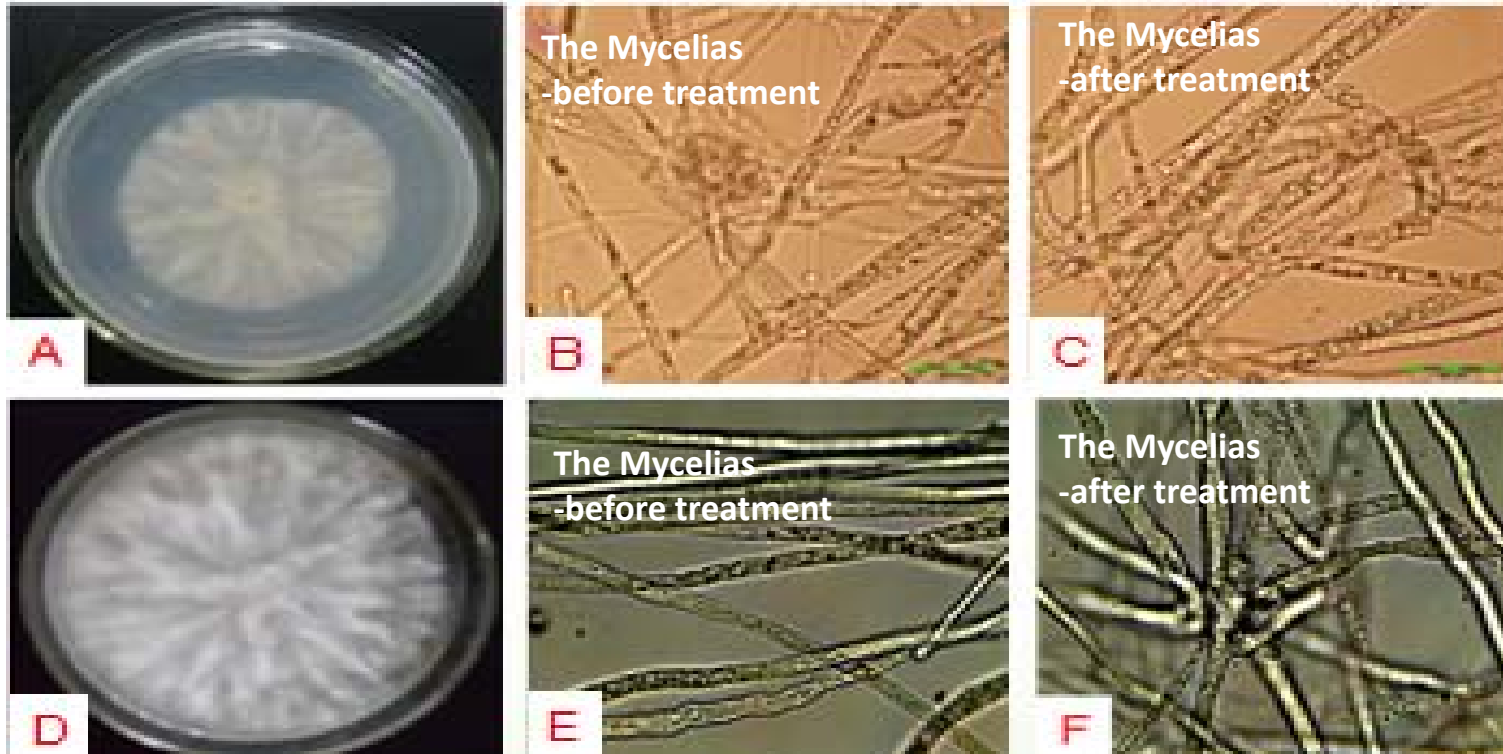


➤ Strain screening process





4. Mode of Action--by inhibit the growth of pathogen



- After treatment with Carer™ the mycelias swells became thicker and raised nodules in abnormal growth.



5. Carer™ Treatment result



- *The treatment effect on Rice Red leaf disease*



- *The treatment effect on Taro*
- *Promote rooting & No soft rot occurs*



5. Carer™ Treatment result



➤ *Without treatment -- Citrus Canker occurs*



➤ *With treatment -- Citrus fruit grows healthy*



5. Carer™ Treatment result



➤ *Honey-dew melon Bacterial Angular Leaf Spot*

➤ *After treatment -- The melon fruits grow well*



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6. Benefit of Carer™

- **Carer™ has a good inhibitory effect on pathogenic**, it can secrete active peptides, Ibacin, antibiotics, polysaccharides, alkaloids and other active ingredients to inhibit the germination and growth of pathogenic. It can also secrete a variety of extracellular enzymes, decompose the cell wall and cell membrane of pathogenic, cause the pathogen to die.
- **Carer™ can promote crop growth.** It can fix nitrogen, release insoluble minerals, produce plant nutrients and hormones (auxin, gibberellin, kinetin) to promote the growth of crops.
- **Carer™ can induce stress resistance in crops.** It can secrete a variety of immune proteins , which can improve crop resistance to cold or drought weathers and enhance crop immunity.
- **High activity&strong vitality: Carer™** takes effect faster than other bio-pesticides. Besides, it can be mixed with most pesticides .





7. Application crops



Fruit trees:

Citrus : Canker

Mango: Bacterial Angular Leaf Spot

Kiwi: Blossom Blight, Gray Mold, Canker

Peach ,Cherry : Bacterial Shot-hole

Field crops:

Rice bacterial angular spot,

Rice bacterial blight.



Vegetables:

Ginger: blast

Cucumber,Watermelon : Angular leaf spot

Tomatoes, Peppers, Potatoes : Bacterial wilt,Black shank,soft rot,

Tobacco : Bacterial Wilt, Black Shank





8. Usage and recommendation

Crops	Target Disease	Dosage	Method
Fruit tree	Bacterial /Fungal diseases	Diluted 800-1200 times	Foliar Spraying
Vegetables	Bacterial /Fungal diseases	1200-1800g/Ha	
Field crops	Bacterial /Fungal diseases	1200-1800g/Ha	



9. Cautions

- It is recommended to use **Carer™** in the early stage of the disease, mixed it with water and sprayed evenly, applied once every 7-10 days, used 2-3 times per season, the safety interval of **Carer™** is 7 days.
- It is better to apply **Carer™** in the dusk or cloudy day. Do not use it under strong sunlight or windy day or when it rains within 1 hour.
- **Carer™** cannot be mixed with copper series product or streptomycin series fungicides; it cannot be mixed with strong acid and strong alkaline substances.
- **Carer™** is toxic to silkworms, avoid using it nearby silkworm houses and mulberry gardens; it is forbidden to clean the application equipment in rivers and ponds and other water bodies to prevent the liquid from polluting the water source.
- Wear protective equipment when using **Carer™** and avoid inhaling the product. Avoid eating and drinking during application, and wash hands and face promptly after application. Pregnant and lactating women should avoid contact with this product.
- It should be stored in dry, cool, low temperature, ventilated and rainproof place.
Keep away from fire and heat source and avoid direct sunlight.





10. The analysis report of Carer™

CHICO CROP SCIENCE CO.,LTD



ANALYSIS REPORT OF Carer™

Product Name	Bacillus methylotro-philicus	Batch No.	BM20211209TR
Producing Date	2021-12-09	Test Date	2021-12-09
Test Result & Conclusion			
Analysis Items	Specification	Test results	
Appearance	Off-White Powder	Qualified	
Bacillus methylotro-philicus Content,CFU/G	$\geq 8.0 \times 10^9$	8.0*10 ⁹	
Rate of mixed bacteria	≤ 3.0	3.0	
pH	5.0-8.0	7.5	
Water content,%	≤ 6.0	4.5	
Wetting time, s	≤ 120	80	
Fineness(45 μ m),%	≤ 90	80	
conclusion		Qualified	
Report Date 2021-12-09			

Chief Analyzer: Xia Lang

Examiner: Wang Jiajia

Inspector: Xie Min



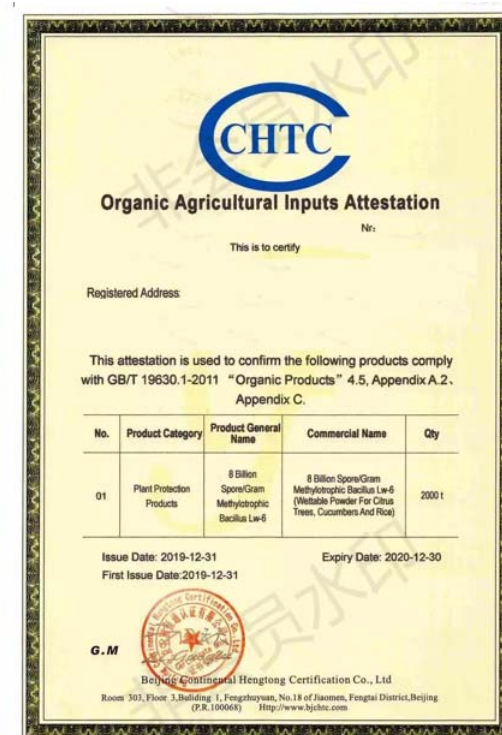
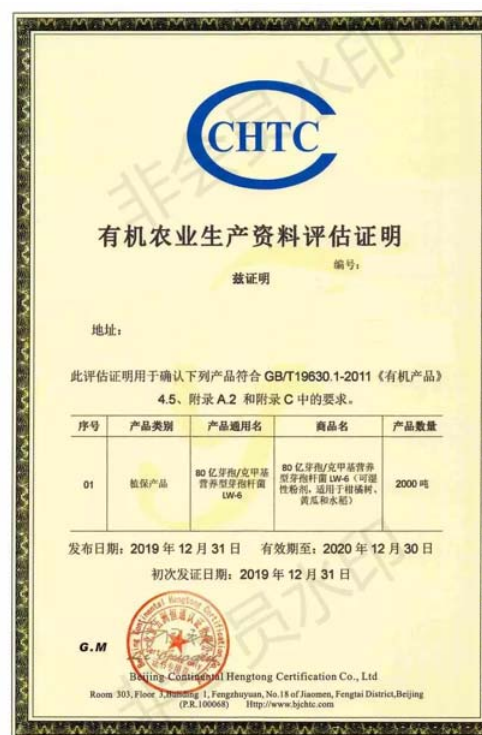
11. Organic certification

Patent certification



Biological control bacterial diseases

Organic certification



---By CHICO Kat

Thank you !

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