

A microscopic view of numerous green, rod-shaped bacteria, likely PGPR, scattered across a light blue background. The bacteria are elongated and some show flagella. The text is overlaid on this image.

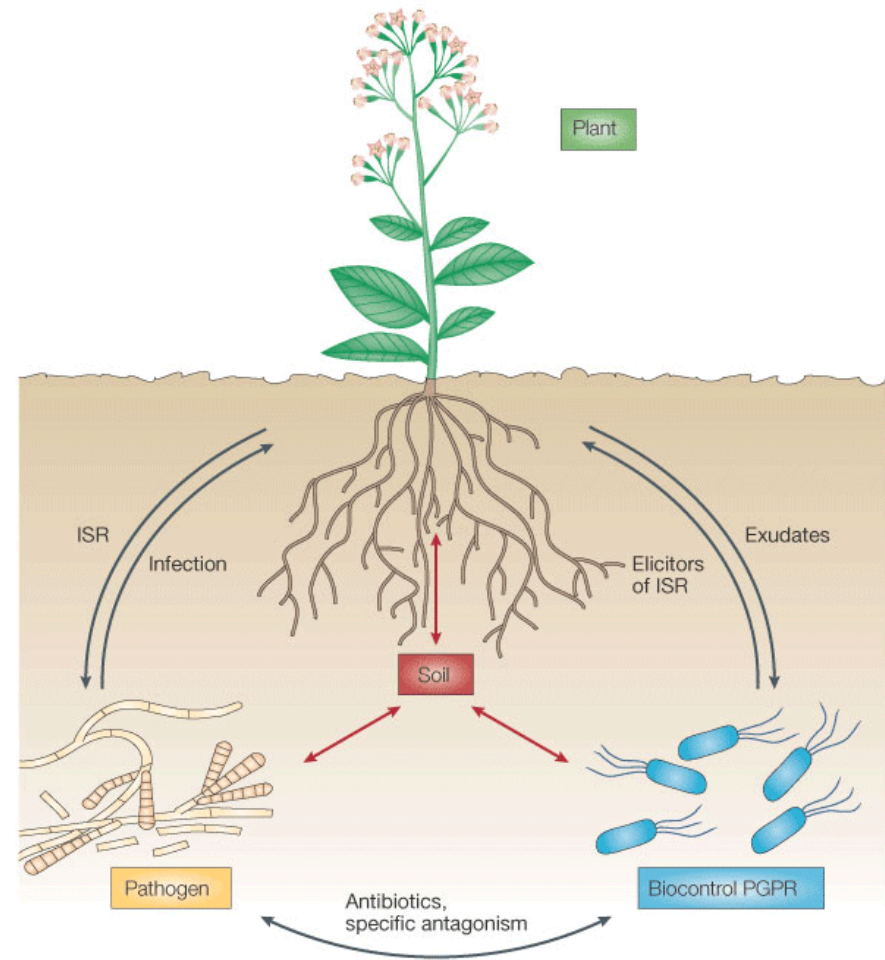
Treating seeds with PGPR

Ermita Hernandez

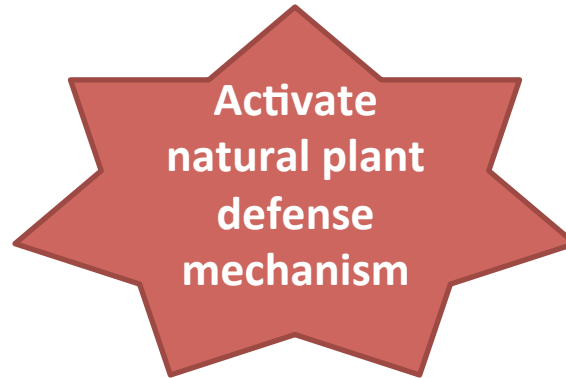
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Plant Growth Promoting Rhizobacteria

- Enhance root development by producing phytohormones
- Activate natural disease fighting compounds in the plants



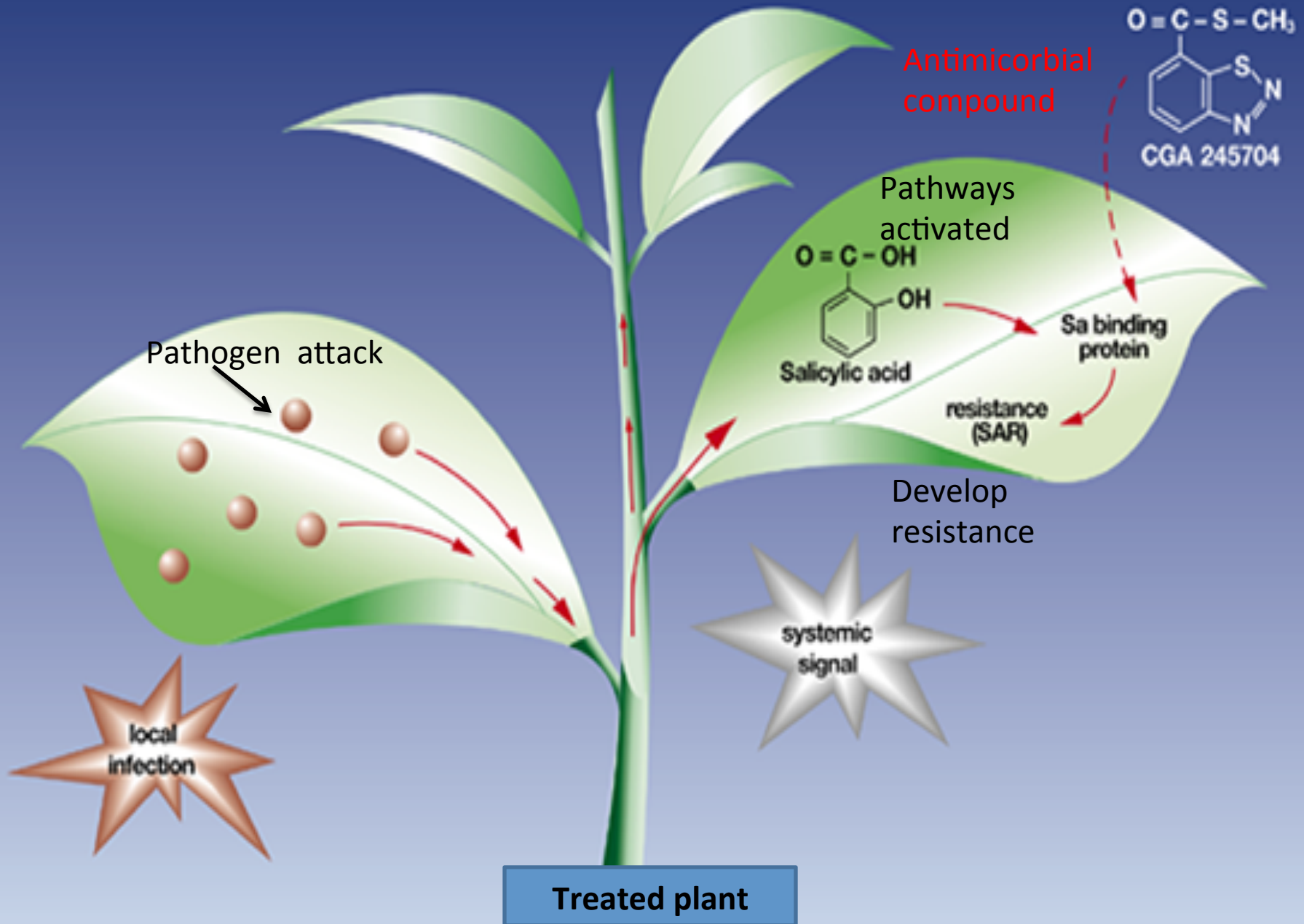
Induce plant resistance



Induce systemic
resistance (ISR)

Systemic acquire resistance
(SAR)

Systemic acquire resistance (SAR)



PGPR formulations

- Seedling dip
- Soil application
- Foliar spray
- Seed treatment

***Read label carefully

How to inoculate PGPR as seed treatment

Materials

- Distilled water
- Scale
- Measuring cup (ml)
- Plastic or glass jars
- Plastic medical syringes

Step 1:

Amount of treatment needed

- $\frac{0.5 \text{ ounces Kodiak}}{100 \text{ lbs of seeds}}$



- $\frac{0.05 \text{ ounces Kodiak}}{10 \text{ lbs of seeds}} \times 29 \text{ (oz to grams)}$

= 1.43 grams of kodiak / 10 lbs of seeds

Step 2:

Amount of slurry mix needed

- 20 fl oz total slurry
100 lbs seed



- 2.0 fl oz total slurry x 30 (fl oz to ml)
10 lbs seed

= 60 ml total slurry/ 10 lbs of seed

Slurry mixture

- Add water to the measuring cup until it reads the amount of slurry needed (60 ml). Place the amount of treatment (1.43 kodiak) into the measuring cup and stir.
- Calculate amount of slurry to apply to seeds.
 - Weight the seeds that needs to be treated
 - Use a 4% of seeds weight to treat seeds

Ex. 100 grams of seeds use 4 ml of slurry mix (if not enough increase slowly until you have a good coverage and seeds are complete moist)

Apply the slurry mix to seeds

- If using new container, clean treating container, the container should be pretreated by initially adding an equivalent amount of slurry mixture.
 - Apply the amount of slurry mixture evenly around the sides of the jar until the seeds is evenly treated.
 - Add seeds to the jar and shake/roll seed inside jar until the seed is evenly treated and there is little or no treatment remaining visible.
 - Empty the treated seed into a clean paper bag and allow to dry.
- * Dry for 4 hours or more (if too wet – 1 to 2 days)

Thank you!