Summary of: Phosphoinositide-signaling is one component of a robust plant defense response

Key findings:

1. InsP5-ptase plants have greatly reduced basal InsP3 levels, constitutively expressing the human type I inositol polyphosphate 5-phosphatase.

2. InsP5-ptase plants are more sensitive to flagellin (FLg22) treatment, showing delayed and reduced responses to gravity, salt, cold, and wounding.

3. InsP5-ptase plants are less resistant to Pseudomonas syringae pv. tomato (Pst DC3000) infections, showing higher bacterial loads and reduced SAR.

4. InsP5-ptase plants have lower basal SA levels and delayed SAR induction in systemic leaves.

5. InsP5-ptase plants have reduced basal expression of defense-related genes, including PR-1, PR-2, PR-5, and AIG1.

6. InsP5-ptase plants have delayed induction of PR-1 gene expression in systemic leaves.

7. InsP5-ptase plants have reduced basal expression of some defense-related genes, including CRT3, BiP3, and PR-2.

8. InsP5-ptase plants have reduced basal SA levels and delayed SA induction in systemic leaves.

9. InsP5-ptase plants have reduced basal expression of PR-1, PR-5, CRT3, and BiP3.

10. InsP5-ptase plants have reduced basal expression of PR-1, PR-5, CRT3, and BiP3.

11. InsP5-ptase plants have reduced basal expression of PR-1, PR-5, CRT3, and BiP3.

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32. InsP5-ptase plants have reduced basal expression of PR-1, PR-5, CRT3, and BiP3.

33. InsP5-ptase plants have reduced basal expression of PR-1, PR-5, CRT3, and BiP3.

34. InsP5-ptase plants have reduced basal expression of PR-1, PR-5, CRT3,