

Problem: Green Tubers



Plants affected: Potato

Description: This condition is not caused by an insect or disease but is due to sunlight producing green chlorophyll in the tuber and with it, a colorless glycoalkaloid, solanine. Solanine is a substance that can cause illness and allergic reactions. Solanine also produces a bitter taste when potatoes are eaten.

All potatoes contain solanine but the concentration can increase ten-fold if potatoes are exposed to light. A 200 pound person would need to eat 20 pounds of normal potatoes a day to reach toxic levels. However, only 2 pounds are needed in that same 200 pound person to cause a reaction.

Recommendations: There are several steps to consider in order to avoid problems with green potatoes.

- If potatoes are exposed while growing, cover with soil.
- Store potatoes in a dark location.
- If potatoes appear green, cut away the green area before cooking. Solanine is concentrated near the skin; usually no deeper than 1/8 inch.
- Do not eat a potato that tastes bitter. Cooking does not destroy the solanine.

References:

1. [Green Potatoes: The Problems and the Solution](#), University of Nebraska – Lincoln, G1437
2. [Potatoes Turning Green](#), Purdue University, Yard and Garden News: Autumn Gardening Stories

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