

Alaska Agriculture Day

Seed Potato Activity



For questions please contact:

Johanna Herron: (907)-374-3714, Johanna.herron@alaska.gov

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Objective:

The objective of this activity is to teach how to plant and grow potatoes using certified seed potatoes. Certified seed potatoes are critical to use instead of potatoes purchased for eating, from the grocery store, to prevent the spread of potato diseases such as Late Blight, a highly contagious potato disease.

*This activity is an opportunity to talk about:

- why it is important to use certified seed potatoes for growing,
- what healthy potato choices are,
- how to plant, grow, and harvest a potato

Materials: (Estimated cost of materials per 5 students is \$3.00)

- Biodegradable plant pots (can use strawberry crates or any potting resource)
- Alaska certified seed potatoes
- Planting soil
- Masking tape & Marker for labeling

Optional materials:

- Knife (if cutting the seed potatoes in half)
- Potato product models to talk about nutrition

Lesson Topics: PK-12

Depending on the age group the lesson can draw on a number of different topics:

- ***Counting and measurement*** - this can be as basic as 1-2-3 or as complex as the economics of utilizing seed potatoes. Simple activities can be about counting the number of eyes on the potato. For more complex economic activities there are a number of options; 1) look at the economics of growing your own food, include labor and materials 2) experiment with yield, spacing, and potato variety
- ***Nutrition and health*** – you can discuss any number of things; nutrient balance in soil, the ‘size of a seed’, compare and contrast seeds and vegetables, potato nutrition, potato recipes, seed germination, plant growth, or plant life cycles.
- ***Agricultural science*** –discuss why we must use a certified seed potato and not just a potato you can buy at the grocery store. Can be as simple as product control or as complex as specific diseases within potatoes i.e. late blight, etc.
- ***Critical thinking*** –this can be as simple as ‘how does a potato grow/what kind of vegetable is a potato’ and as complex as figuring out the proper time to plant in different parts of the state or predicting how the seed impacts the soil.
- ***Art and reading*** – Have the kids draw or journal about the growth cycle over the summer!

Procedure

Discussion

Start with a class discussion about why you should use certified seed potato instead of table stock. The key point is to prevent spreading potato diseases that can be introduced from imported potatoes. Late Blight is a potato disease that is highly contagious. You can look information up about this at: <http://dnr.alaska.gov/ag/akpmc/potato-program/index.htm> Additionally you can show students pictures of what a disease looks like on the potato and on the leaves in a crop.



Activity

Station set up:

Each station should have 1-4 students each with a planting pot, certified seed potatoes, and soil. *If you choose to use a knife and cut the potatoes then have an adult at each station or move around from station to station to 'count the eyes' and cut accordingly. Draw an example of the final product on the board for them to follow the steps with.

1. Count and be sure each student has a piece of seed potato with 2-3 eyes.
2. Get a scoop or 'half' the pot amount of planting soil and fill the bottom of the pot.
3. Place the whole, or piece of, seed potato into the pot so it's resting on top of the soil.
4. Cover the seed with soil until the pot is almost full.
5. Have each student write their name on a piece of masking tape to put on their pot along with the product they planted and the date.

Seed potatoes look like any other potato, making sure they are certified is the key!



Discussion

End with a discussion about healthy potato choices. There are many places to go for nutrition information about potatoes, one is: <http://www.potatogoodness.com/nutrition/>

Show pictures of the different ways in which we eat potatoes and compare how the calories change with each potato product. Make sure you are comparing equal amounts and talk about how much that portion might be. Discuss how adding things to a potato product can increase the calories (i.e. a baked potato).

