

1. **SPUDS – UNDER ORGANIC MULCH VS. IN THE SOIL - FNE01-365**
2. The goals of this project: To continue the comparison of potatoes planted in the soil to potatoes planted under mulches by measuring man-hours used to sow, to mulch or hill during growth, and to harvest; incidence of wireworm damage; and yields at maturity. The yield comparison was to include not only potatoes under the soil to potatoes under mulch, but also to compare yields of spuds grown under different organic mulches (grass clippings, hay, and newspaper).
3. Our farm information remains unchanged since inception of the project.
4. Cooperators and their roles: Tom McCutcheon, Roane County Extension Agent, served as Technical Advisor, offering advice and sources of information, as well as moral support. Mary McCormick, Roane/Jackson Master Gardener Association, scheduled classroom time for presentation of this project. Linda Beatty and Claudia Gianninni will allow space in their respective associations' newsletters for written presentation of this project and its summary. Dan Cosgrove provided sweat equity in fulfilling a portion of the labor requirements.
5. Sixty pounds each of four varieties of standard size potatoes were randomly planted in prepared beds three feet in width, with spud spacing equidistant in all beds. Spuds planted under the soil (no mulch) were set 4-5" deep. Spuds planted on top of the soil received 12" of mulch, either grass clippings, hay, or shredded newspaper. Floating row covers were applied to keep Colorado Potato Beetle and whitetail deer damage to a minimum. When growth of soil-planted spuds reached 4-6" of new growth, soil was hilled conventionally around the plants. At the same time, 6" of new mulch was applied to the mulched potatoes, with row covers removed and replaced each time.
6. Unfortunately, the project was terminated in July, so no results were tallied. We had hoped to compare the same varieties against the previous year's project, to see if yields and insect damage between varieties were similar, and also to see if yields under different mulches varied.  
A word of caution: One very unexpected result of this project was the severe allergic reaction experienced by one person after ingesting *potatoes that were mulched with newspaper*. This person is sensitive to all grains and especially to legumes, and she surmised that the soy-based ink in the newsprint resulted in the reaction, *even though the potatoes were washed, peeled and cooked before eating*. Since that time, I've heard of several other individuals with this sensitivity to newsprint. I believe that caution and disclosure is necessary to anyone ingesting produce grown in this way, and have mentioned this during presentations of the project.
7. Over 6" of rain fell during early morning hours of July 8<sup>th</sup>, resulting in widespread flooding in Calhoun and surrounding counties. A logjam occurred at a nearby culvert, resulting in floodwaters washing out random sections of the project. Photos of the flood damage are enclosed. David Holm, Program Manager, NESARE, was contacted, and a site visit with Mr. Holm took place in July, at which time the project was discontinued..
8. There are no economic findings to report, due to project termination.
9. Even though I hate to dig potatoes from the soil, I would really like to complete this project to see if the numbers mesh with last year's project. The debris which caused the flooding has been removed, brush and shrubs trimmed and removed to allow water flow. The next step would be to repeat FNE01-365 project and compare figures.
10. Yes, I will always plant potatoes ON the soil UNDER mulch, instead of in the soil, except as a control for projects such as this one. I am convinced that planting spuds in mulch saves many man-hours and results in far less wireworm damage than is found in potatoes planted in soil. I am always looking for ways to save time while improving the product.
11. Outreach is always ongoing: Presentations on this project were made in 2001 at a Master Gardener class in Roane County, at Vandalia's Backyard Heritage Gardening Series, at WV's Sustainable Festival (with other SARE grant recipients), at WV Herb Association's annual conference. A "reader-friendly" version of the project is underway and will be printed in both the WVHA's and MSOGBA's newsletters. Copies will be forwarded to NESARE when completed.
12. Sue Cosgrove, November 25, 2001