



# Potato Progress

Research and Extension for Washington's Potato Industry

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## Potato Commission Solicits Research Proposals on Specific Topics

Each year about this time the research committee of the WSPC begins its 6-month process of soliciting, reviewing, and recommending for funding research proposals. Its Request For Proposals (RFP) was completed and distributed in September, and contains the following description of the WSPC research review process (see <http://www.potatoes.com/research/rfp/2004.pdf?IDLlist=19,76>):

*All WSPC research proposals are reviewed, and rejected or recommended for funding, by the **Research Council** – a group of 17 potato industry representatives. Five of these are WSPC Commissioners, who are part of the **Research Committee**, while the other 12 are volunteers from the potato industry including growers, processors, ag/chem reps, and extension personnel. The members of the Research Council generously donate their time toward continuing top-level research in the potato industry.*

*Only "new" proposals are reviewed at the Preliminary Research Review in Moses Lake (see schedule below). All principle investigators on "new" projects are expected to present their proposals at that review. What constitutes a "new" proposal is up to the WSPC, and includes entirely new researchers and projects, renewals of projects after the initial project has expired, and continuing projects that have been changed in any significant fashion. A subset of these proposals will be invited back for the Final Research Review in February, contingent upon satisfactory modification as may be suggested by the Research Council. The Final Research Review will span two days, and will entail presentations of results and proposals for all projects: "continuing," "ongoing," and "new." All projects must be presented in person to the Research Council at the Final Research Review, and all presenters are expected to attend the entire research review. Such attendance is intended to keep all potato researchers informed of the entire potato research arena, and hopefully foster better research and more cooperation among disciplines.*

### ***Schedule (tentative) for proposal submission and Research Reviews:***

- 1. All proposals due: November 15, 2003.*
- 2. Preliminary Research Review (Moses Lake): December 17, 2003.*
- 3. Revised "new" proposals and progress reports due: January 15, 2004.*
- 4. Final Research Review (Pullman): February 12-13, 2004.*

In addition to the review process, the RFP describes the extensive reporting requirements that scientists must follow, including newsletter articles, quarterly reports, and annual reports.

This year, the commission requested proposals on the following topics:

| Topic Area           | Specific Project  |
|----------------------|---|
| Fertility & soils    | <b>Optimize nitrogen fertilizer use to reduce costs and increase profits.</b> This project would be expected to examine the best grower practices in detail, and design experiments that lead to improvement to those practices. The project should take into account soil characteristics such as N release rates, crop residue decomposition, micronutrients, etc. The project should include detailed examination of plant physiology as it relates to the fertility regimes under study. These parameters should include tuber set (number and timing), root and shoot growth, etc. The commission expects much of the work to take place in grower-cooperator fields, and to involve experts in soils and horticulture/physiology. |
| Irrigation           | <b>Timing of irrigation as it relates to tuber set in the Skagit Valley.</b> This project should be conducted in the Skagit Valley, and would examine the relationship between irrigation and tuber set in common varieties grown in that area.   |
| Insects & arthropods | <p><b>Wireworms – with a focus on application methods, timing, etc. in addition to products and rates.</b> This project should address the variability that growers experience in wireworm control from time to time and place to place using the same chemical and rate.</p> <p><b>Seed corn maggot – biology, distribution, damage, etc.</b> This project should focus on the who, what, where, and why of damage to potato seed and young plants related to maggots. It should especially focus on any relationship between maggot infestation and stem soft rots.</p>   |
| Diseases & nematodes | <b>Stem rot.</b> This problem is presumed to be caused by bacteria, but source and timing of inoculum, and methods of control are all unclear. The commission would like to see a project focus on all aspects of this disease, including management recommendations.   |
| Storage              | <b>Storage rot control with in-furrow fungicides.</b> There is some indication that treatment of potatoes at planting time with in-furrow fungicides can reduce rot in storage caused by various pathogens. The commission would like to see a trial of all appropriate fungicides in this regard.  |

The WSPC research review process is open to any interested parties. Meetings will be announced in *Potato Progress*, and we would welcome your participation.

## Upcoming Educational Events

- ✓ Hermiston Farm Fair & Trade Show Potato Seminar, December 3.
- ✓ Columbia Basin Potato Workshops
  - January 7, Moses Lake.
  - January 8, Pasco.
- ✓ Washington State Potato Conference and Trade Show, February 3-5, Moses Lake.
- ✓ Western Washington Potato Workshop, February 27, Mount Vernon.

## Mustard Green Manure Field Day

*Thursday, October 23rd, 2003*

*10 am at the Dale Gies Farm*

1.5 miles west of Rd. M on Rd. 5 SE  
Moses Lake, Washington

*New Information on*  
Early planting    Wind erosion control    Mustard varieties

*And Two Nematologists*

Ekaterini Riga, WSU-Prosser will talk about her screening of mustards and other brassicas for nematode control

Russ Ingham, OSU, will talk about his work using combinations of green manures and nematicides

*For More Information Call Andy McGuire*  
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Also Sponsored by

- **High Performance Seed, Moses Lake, WA.**
- **McKay Seed, Moses Lake, WA.**
- **Spectrum Crop Development, Ritzville, WA.**

## Washington Potato Acreage, Production, and Storage Data

| Crop Year | Harvested Acreage | Yield Per            |        | Production (000cwt) | Stocks on Hand (000 cwt) |        |        |        |        |        |        |
|-----------|-------------------|----------------------|--------|---------------------|--------------------------|--------|--------|--------|--------|--------|--------|
|           |                   | Harvested Acre (cwt) | Tons/A |                     | Dec. 1                   | Jan. 1 | Feb. 1 | Mar. 1 | Apr. 1 | May 1  | June 1 |
| 1966      | 58,000            | 376                  | 18.8   | 21,830              | 18,300                   | 7,150  | 5,500  | 3,950  |        |        |        |
| 1967      | 64,000            | 345                  | 17.3   | 22,090              | 10,660                   | 8,800  | 6,600  | 4,400  |        |        |        |
| 1968      | 64,000            | 378                  | 18.9   | 24,173              | 10,430                   | 8,800  | 7,050  | 5,100  |        |        |        |
| 1969      | 71,700            | 415                  | 20.8   | 29,796              | 15,300                   | 13,100 | 10,300 | 7,800  |        |        |        |
| 1970      | 87,000            | 386                  | 19.3   | 33,590              | 18,500                   | 16,000 | 12,500 | 9,700  |        |        |        |
| 1971      | 78,000            | 386                  | 19.3   | 30,110              | 16,450                   | 13,500 | 10,350 | 7,500  |        |        |        |
| 1972      | 75,000            | 418                  | 20.9   | 31,365              | 15,800                   | 13,400 | 10,300 | 7,100  | 4,200  |        |        |
| 1973      | 82,000            | 430                  | 21.5   | 35,260              | 18,600                   | 15,600 | 12,600 | 9,100  | 5,500  |        |        |
| 1974      | 98,000            | 420                  | 21.0   | 41,160              | 22,500                   | 20,500 | 16,800 | 12,800 | 8,900  |        |        |
| 1975      | 105,000           | 460                  | 23.0   | 48,300              | 27,900                   | 24,100 | 19,900 | 11,500 | 10,000 |        |        |
| 1976      | 124,000           | 450                  | 22.5   | 55,800              | 33,200                   | 29,700 | 25,000 | 20,100 | 15,200 |        |        |
| 1977      | 110,000           | 460                  | 23.0   | 50,600              | 28,400                   | 24,700 | 20,800 | 15,900 | 11,300 |        |        |
| 1978      | 109,000           | 465                  | 23.3   | 50,685              | 32,000                   | 28,800 | 24,000 | 19,300 | 14,500 | 9,500  |        |
| 1979      | 103,000           | 475                  | 23.8   | 48,450              | 30,800                   | 27,300 | 23,300 | 19,000 | 14,400 | 10,500 |        |
| 1980      | 87,000            | 505                  | 25.3   | 43,935              | 24,300                   | 22,000 | 18,500 | 14,600 | 10,900 | 7,200  |        |
| 1981      | 108,000           | 490                  | 24.5   | 52,920              | 29,200                   | 25,100 | 21,000 | 17,000 | 12,600 | 8,200  |        |
| 1982      | 110,000           | 480                  | 24.0   | 52,800              | 29,200                   | 25,100 | 21,600 | 17,100 | 13,200 | 8,600  |        |
| 1983      | 103,000           | 520                  | 26.0   | 53,560              | 29,500                   | 25,600 | 21,800 | 16,500 | 11,000 | 7,100  |        |
| 1984      | 115,000           | 495                  | 24.8   | 56,925              | 29,600                   | 25,900 | 20,800 | 16,600 | 11,300 | 7,000  |        |
| 1985      | 127,000           | 505                  | 24.3   | 61,100              | 33,500                   | 30,000 | 25,700 | 21,000 | 16,200 | 9,700  |        |
| 1986      | 118,000           | 510                  | 25.5   | 60,200              | 32,300                   | 28,000 | 24,400 | 20,400 | 14,600 | 8,700  |        |
| 1987      | 124,000           | 540                  | 27.0   | 67,000              | 36,600                   | 32,900 | 28,300 | 22,800 | 17,500 | 12,400 |        |
| 1988      | 115,000           | 550                  | 27.5   | 63,300              | 36,700                   | 32,100 | 27,700 | 22,500 | 16,200 | 10,700 |        |
| 1989      | 118,000           | 545                  | 27.3   | 64,310              | 34,500                   | 30,400 | 25,100 | 20,000 | 13,100 | 7,100  |        |
| 1990      | 132,000           | 515                  | 25.8   | 67,980              | 35,500                   | 29,500 | 24,500 | 19,800 | 15,100 | 10,400 |        |
| 1991      | 141,000           | 535                  | 26.8   | 75,440              | 37,000                   | 32,200 | 27,000 | 21,200 | 15,000 | 9,600  |        |
| 1992      | 125,000           | 525                  | 26.3   | 69,300              | 31,000                   | 26,700 | 24,900 | 19,800 | 13,000 | 8,200  |        |
| 1993      | 150,000           | 590                  | 29.5   | 88,500              | 43,500                   | 38,500 | 32,000 | 26,500 | 20,000 | 13,500 |        |
| 1994      | 152,000           | 585                  | 29.3   | 88,900              | 47,500                   | 43,000 | 37,500 | 30,500 | 23,500 | 17,000 |        |
| 1995      | 147,000           | 550                  | 27.5   | 80,850              | 39,500                   | 33,000 | 30,500 | 25,000 | 18,000 | 12,500 |        |
| 1996      | 161,000           | 590                  | 29.5   | 94,990              | 48,000                   | 42,000 | 36,500 | 30,000 | 23,000 | 16,500 |        |
| 1997      | 152,000           | 580                  | 29.0   | 88,060              | 47,000                   | 41,500 | 36,500 | 29,500 | 22,500 | 16,000 |        |
| 1998      | 165,000           | 565                  | 28.3   | 93,225              | 49,000                   | 43,500 | 36,500 | 29,500 | 21,500 | 14,500 | 7,500  |
| 1999      | 170,000           | 560                  | 28.0   | 95,200              | 48,000                   | 41,000 | 35,000 | 28,000 | 20,500 | 14,500 | 7,000  |
| 2000      | 175,000           | 600                  | 30.0   | 105,000             | 59,000                   | 52,000 | 44,500 | 37,500 | 29,500 | 21,500 | 13,000 |
| 2001      | 160,000           | 590                  | 29.5   | 94,400              | 53,000                   | 45,500 | 40,000 | 32,500 | 25,000 | 18,000 | 10,000 |
| 2002      | 170,000           | 560                  | 28.0   | 95,200              | 53,000                   | 46,500 | 40,000 | 33,000 | 25,500 | 19,500 | 12,000 |
| 2003      | 165,000           |                      |        |                     |                          |        |        |        |        |        |        |

**Data from National Agricultural Statistics Service**