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## SOME NOTES ON POTATO SEED

by  
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Several items have come up recently involving potato seed. These will be discussed briefly.

Seed Size

Over the years County Extension Agents, Washington State University Department faculty and Washington State Potato Commission personnel have been conducting seed size surveys. The results have been presented in Spud Topics (see Vol. 34, No. 18, Feb. 22, 1989 for 1988 results) and at various meetings. Previously the seed pieces under 1 oz. were separated out and reported as a group. Over the last few years this size class has constituted about 10% of the material planted. This season the small size class has been changed to be anything under 1.25 oz. A preliminary look at the early data shows above 20% of the seed going into the planter to be in this size class. Individuals may be intentionally reducing seed size in response to high seed costs. Dr. Tom Schotzko presented information at the 1989 Potato Conference showing this to be quite costly.

Seed Spacing

Schotzko also showed data that suggests that when seed price increases, a better choice for seed cost adjustment is to increase spacing between seed pieces. He states that a \$3. increase in seed piece cost will be offset by an increase in seed spacing of 1 1/2 inches.

Seed Age

Physiologically older seed gives higher stem and tuber numbers. This results in a shift in tuber size distribution towards smaller tubers. Recent research in Idaho suggests that some of this effect (detrimental for fresh and processing potatoes, beneficial for seed growers) can be offset by using larger seed pieces.

(continued)

Increasing between-plant spacing has also been suggested as a means of adjusting for high stem and tubers numbers. Both may be appropriate for the 1989 growing season since it is likely that much of the seed coming into Washington this year is somewhat physiologically aged. This is due to the climate in the majority of our seed areas this past growing year. The hot, dry climate during the growing season coupled with a warm dry harvest season are factors known to result in aged seed.

Planting and Stand Establishment

Data presented at the 1989 Potato Conference shows that with Russet Burbank an 80% stand loss results in a 20% yield reduction when the intended spacing is 9" between plants. It also increases the % of US No. 1 tubers 10 oz. and larger from 11% to 21%. An additional 30% stand decrease (from 80% to 50%) caused only an additional 14% yield loss and only increased the 10 oz. and larger US No. 1 to 28%. The 100% stand was assumed to be a 9 inch spacing. What this says is that if you desire a 9" spacing and get an 11.5" spacing, the major influence of stand depletion has been reached, i.e. the major yield loss and change in tuber size distribution has occurred due to improper planting. Plant them right to grow them right!!!

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Washington State Potato Commission  
Election Results

The results of the recently held WSPC election to fill vacancies that will occur on July 1, 1989 are as follows:

- |                                  |   |
|----------------------------------|---|
| <u>District 1 - Position 3 -</u> | Rick Miller, Othello<br>(unopposed; deemed elected)                             |
| <u>District 4 - Position 8 -</u> | Bryan Alford, Pasco & Ron Reiman, Pasco<br>were nominated<br>Ron Reiman elected |
| <u>District 5 - Position 9 -</u> | Roger Jungquist, Mt. Vernon<br>(unopposed; deemed elected)                      |
| <u>At Large Position #13 -</u>   | Allen Olberding, Pasco elected to replace<br>Walt LePage, Pasco.                |

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Annual Potato Meetings  
Red Lion, Pasco, Washington  
June 20-23, 1989

- |              |   |
|--------------|---|
| June 20 -    | Washington State Potato Commission  |
| June 21 -    | State of Washington Potato Committee  |
| June 22-23 - | Washington Potato & Onion Association and<br>Northwest Perishable Shipper's Cooperative Association |