

## CALU LOW INPUT POTATO TRIALS 2006

ADAS will be undertaking further potato trials this year as part of the Farming Connect programme for the Centre for Alternative Land Use (CALU). The trials will be undertaken in the high blight-risk area of coastal West Wales and follow on from the trials of blight resistant varieties undertaken in 2004 and 2005.

Late blight, *Phytophthora infestans*, is a major problem for potato growers and the use of blight resistant clones is an important alternative to the use of fungicides. This is especially important for environmentally benign systems of cultivation such as organic agriculture. According to ADAS Consultant David Frost, the 2004 and 2005 trials of blight resistant cultivars, which included Hungarian Sarpò varieties, showed that good yields can be obtained from these crops in high-risk areas without the use of fungicides.

The 2004 trials undertaken for the Farming Connect Organic Development Centre, showed that the Sarpò clones had greater resistance to foliar blight than standard varieties such as Desiree, Cara, Maris Piper, Lady Balfour and Stirling. There was a considerable range in yield but overall the Sarpò varieties had the highest yields in the trial. The main factor affecting yields of the standard varieties was their susceptibility to foliar blight, whereas the differences in yield among the Sarpò clones depended on how vigorously the plants grew and how well they could out-compete weeds on the organic site.

“We had similar results in the 2005 CALU trials, and we also looked at the effect of planting densities on yield for the Sarpò variety, Axona,” said David Frost. “We found that closer seed spacing and row widths produced higher yields of small sized tubers, whereas wider seed spacing and row widths produced higher yields of large sized tubers. The trouble we found with late harvesting very large tubers were defects such as skin finish and the condition known as hollow heart which affect marketability of the crop.”

“ADAS held open days in 2004 and 2005 and these showed that farmers are interested in these new blight resistant clones, but they need more information about how to produce a crop that is acceptable to the market”, said David Frost. “We gave visitors the chance to try some of the new Sarpò clones cooked as baked potatoes and as chips and we asked them to compare them with their usual potatoes”, he added. “Overall these tests found a generally positive response and the majority of tasters said they would consider buying them, but we need more blind-test trials with professional taste-testing panels as used by the Welsh Food Centres.”

This year there will be more demonstrations to show the wide range of blight resistant clones that are potentially available from the Savari Research Trust and other suppliers. Additionally the ADAS / CALU trials will also demonstrate how techniques such as time of harvesting and the use of brassica green manures prior to planting can reduce problems of poor skin finish and improve the marketability of crops.

In Wales, potatoes account for 10% of the 500,000 tonnes (£191 million farm gate value) of fresh fruit and vegetables marketed. Despite this level of production, reports from pilot public procurement projects show that Local Authorities are often unable to source sufficient supplies of Welsh potatoes.

As the market for local produce develops – including local & direct sales, public procurement and the catering and hospitality market – the demand for this prime staple will increase. The availability of potato varieties that can produce economically viable yields in blight prone areas will help enable Welsh farmers and growers to meet this demand.

David Frost

ADAS

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