Organic Horticultural Seed in Wales

A survey of growers' experiences of varieties grown from organic seed in 2006

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1. Background

The Organic Standards require organic producers to use organic seed. However, a derogation can be obtained from certification bodies to allow the use of non organic seed where appropriate organic material is not available in the UK. An official database of organic seed availability, 'Organicxseeds', has been developed and is used as the basis for derogation decisions. However, there is a lack of information and a great deal of uncertainty in the minds of growers, about the performance of many varieties available in organic seed. This means that growers could potentially have to make variety choices on the basis little or no information.

2. Objectives and methods

For the last 4 years, Organic Centre Wales, with support from Farming Connect, has coordinated a survey to help organic growers in Wales share information about the performance of varieties grown from organic seed. The survey (see Appendix I) was sent to all members of Farming Connect Horticultural Discussion Groups and other individuals who had responded in previous years or otherwise expressed an interest in the project. The information from the returns was collated and analysed and the results sent back out to growers in time to inform their variety choices for the 2007 season.

3. Results & Discussion

3.1 Profile of respondents

Of the 61 surveys mailed out, 12 were returned, with 10 growers providing detailed variety performance information. Growers were asked to identify their 10 most important crops and the results are summarised in Table 1. These were broadly similar to previous years, but there was a noticeable drop in the number of growers producing brassicas in general and cabbage in particular, and an increase in the range of crops identified as key to the business. While it is difficult to draw firm conclusions from such a small sample of growers, it is consistent with a general shift towards the higher value, lower volume crops identified in recent HDRA 'UK Market for Organic Vegetables' reports

Nearly all growers were producing exclusively for local markets. Only one grew for other markets (the multiples and other unspecified outlets). This continues the trend observed last year towards local markets, which is again in line with the rapid growth of the direct marketing in the UK identified the 2004 and 2005 HDRA market reports.

No. Growers	Crop
8	Broad Beans
7	Lettuce
6	Carrots, Potatoes (early), Leeks, Onions
5	Beetroot, Potatoes (Main crop) , Leaf crops
4	Tomato
3	Calabrese, Courgettes, Kale, Runner beans, Squash, Winter cabbage
2	Cauliflower (Summer) , Swedes, Pepper, Grapes, Sweet corn
1	Garlic, Parsnips, Summer cabbage, Brussels sprouts, Oriental vegetables, Celeriac, Spinach, Romanesque, Fennel, Cucumbers, Herbs, Rocket, Peas, Strawberries

Table 1: Key crops grown by survey respondents

3.2 Usage, availability and cost of organic seed

The usage of organic seed was very high, with many growers managing to source 100% from organic sources. Of the remainder most used between 85% and 95% organic seed. The grower supplying supermarkets used 5%, mainly because the varieties acceptable to the market were not available in organic seed, and stressed the need for the market leaders to be available if we to make any progress on this issue. A range of other reasons were given why organic seed could not be used including:

- Inappropriate varieties for growing conditions, specifically
  - No club root resistant suede varieties
  - No reliable parsnip varieties with both a 'modern' cooking root and canker resistance
  - No squash varieties that stored well
  - Difficult to find a reliable disease resistance Brussel Sprouts variety for post Christmas period
- Insufficient quantities available
- Poor quality. Specific seed/set borne diseases included white rot on garlic, and white rot and downy mildew on onions

The estimated increased cost of sourcing organic seed (compared to the cost of buying conventional, untreated seed) ranged from 10% to 40%. The availability of graded seed for precision drilling was included in the questionnaire in response to grower concerns raised in 2004. This is still a major issue for those growing field scale vegetables. Only spinach (Palco) and a few but unspecified varieties of carrots, beetroots and swedes were available to the 4 growers who used precision drills.

3.3 Variety Scores

3.3.1 Overview

Growers were asked to rate the varieties they grew from organic seed in terms of emergence, vigour, uniformity, marketable yield and overall performance. The scores are presented in Appendix II. The average 'overall' scores are included from previous surveys under the heading of 'track record'.

For the second year running the response to the survey was low, with 10 growers providing detailed performance data. Collectively they reported on 33 crops and about 175 individual varieties, for many of which there is only one observation, making the data weak. On the plus side, the survey has now been running for a number of years making it possible to look back over a variety's performance over time, which will help

growers to take some account of seasonal variation. The following sections contain some observations for some of the more popular crops as identified in Table 1.

3.4.2 Beetroot

All varieties did well this year.

3.4.3 Broad beans

Super Aquadulce and *Witkem* were again popular varieties, and have performed well now for several years in a row. *Express* also did well this year.

3.4.4 Carrots

Fewer varieties of carrots were grown this year compared to last, and most by one grower only. That said, all varieties performed well (scores of 4 or 5) with the possible exception of *Jupiter*.

3.4.5 Leaf beats

As usual, the leaf beats did well, with all varieties scoring 4 or 5.

3.4.6 Leeks

A broad range of leeks were grown this year, including some that have not featured in the survey previously. Many are winter varieties and were therefore still in the field at the time of survey and thus have no data for marketable yield and overall performance. Of the varieties for which there was data, *Shelton, Tadorna*, and *Varna* did particularly well

3.4.7 Lettuce

As usual the range of lettuce varieties was very broad. There a lot of mediocre performances this year (2 – 3), although many fared much better in previous years and this needs to be borne in mind. Some did do well, scoring 4 or 5 over all, including *Kamilia* (Batavia), *Lambs lettuce*, *Aruba* (Leaf) *Lollo Blondi* (Leaf) *Red Salad Bowl* (Leaf), *Till* (Leaf) and *Winter density*.

3.4.8 Onions

Over all, onions had another rather mediocre year. Centurion was the best, but none stood out as exceptional.

3.4.9 Potato

All the early varieties scored between 3 and 4, broadly consistent with previous years. Of the main crops, *Axona* and *Desiere* struggled this year, but the others put in a solid performance, but again with only one observation for the majority of varieties, the data is weak.

3.4.10 Tomatoes

By and large, a good year for tomato. *Matina, Mexican honey, pitenza, Sakura* (which has performed consistently well in all the survey years) and *Sparta* stood out.

Appendix I: Questionnaire for organic horticultural growers: 2006 season

1. Which of the following best describes your business?
(Please tick one box only)

Crops grown mainly for the supermarkets	☐
Crops grown mainly for the wholesale market	☐
Crops grown mainly for local marketing	☐
Crops grown for a mix of outlets	☐
Crops grown for seed	☐
Crops grown mainly for feed	☐
Other – please specify	☐

2. Please circle up to your 10 most important crops from the following:
(fill in the blank boxes with any crops missed)

Beetroot	Broad Beans	Calabrese	Carrots	Celery	Courgettes
Early Potatoes	Garlic	Kale	Leeks	Lettuce	Main crop Potatoes
Onions	Other leaf crops	Parsnips	Runner Beans	Salad Onions	Squash
Summer Cabbage	Summer cauliflower	Swedes	Turnips	Winter Cabbage	Winter Cauliflower

3. Please list your crops and varieties for the **2006** season grown from ***organic seed only*****.** Please rank vigour, uniformity, and over all performance from 0 to 5, where 0 is very poor, 3 is acceptable and 5 is excellent. Please express emergence and marketable yield as an approximate percentage of total number or seeds sown.

Crop	Variety	Emergence (%)	Vigour (1-5)	Uniformity (1–5)	Marketable yield (%)	Overall Performance (1-5)	Seed Supplier

4. If you did not use organic seed for some/all crops, what were the main reasons for this?

No appropriate varieties available for my growing requirements	☐
No appropriate varieties available for my market requirements	☐
Seed quality was not satisfactory	☐
No appropriately graded of formulated seed available	☐
Cost was too expensive compared to non-organic	☐
Insufficient quantity available	☐
Not available in my area	☐
Other – please specify	☐

5. Can you give an indication of the proportion of varieties used across the holding that were grown from organic seed (of horticultural crops)?

   Estimated percentage: ☐

6. Can you give an estimate of the additional expenditure of the farm on seed compared to using 100% non-organic?

   Estimated percentage increase: ☐

7. Were you able to source graded seed (for precision drilling)? If yes, for which crops and from which suppliers?

8. Further information. – Please use the space below to provide any additional information or comment

9. Personal Details

Thank you for your time.

*Please try to return completed questionnaires by **1st November**,, using the prepaid envelopes enclosed. Prompt responses will help us collate the data quickly and get the results back out to you in time to inform your variety choices for 2007 season.*

Appendix II: Table of Variety Scores

Notes on using the Table

- The table uses a simple scoring system, from 0 (very poor) to 5 (excellent). Emergence and marketable yield are expressed as percentages.

- While every effort has been made to ensure that all the varieties listed are available in organic seed, where they do not appear on the Organicxseeds database, we were unable to confirm this

- Total number of responses = 10

- When using the table the range is important. This may indicate that a variety is generally well-liked but let down by one grower's failed crop.

- The 'Track record' provides an indication of past performance. The figures (e.g. 3, 3.8, 4) represent the overall scores from the 2003 , 2004 and 2005 surveys respectively

- As a general observation the longer a producer has been at it the more experience they have of what a crop should be like and the lower the scores given overall

Abbreviations

- OCG = Organic Gardening Catalogue
- ND = No Data