



New Project

FV 340a

Vining Peas: Extension of variety
evaluation trials

Project Number:	FV 340a
Title:	Vining Peas: Extension of variety evaluation trials
Start and end dates:	1 st March 2011 to 28 th February 2014 (extended to complete 28 th February 2015)*
Project Leader:	PGRO – S. J. Belcher
Industry Representative:	Richard Fitzpatrick, Holbeach Marsh Co-op
Location:	PGRO, The Research Station, Peterborough, PE8 6HJ
HDC Cost:	£25,710

Project Summary:

PGRO evaluates around 15 vining pea varieties annually at National List stage funded by seedsmen and PGRO Levy and the most promising are evaluated in trials for a further two years before being added to the PGRO advisory leaflet on vining pea varieties. There are no other independent facilities for vining pea evaluation in the UK. Trials are only undertaken one site at The PGRO trial ground. The soil type at Thornhaugh represents a small area of the national pea growing production and varieties can often perform differently in other soil types and areas. An extension of the PGRO trials system to include an evaluation of the candidate (Main Trial) commercial varieties in South Lincolnshire will add to refine the evaluation process, with additional information to supplement data from established trials. The need for the extension of these trials has been identified by the PGRO Processed Vegetable Panel as a high priority.

Aims & Objectives:

Project aim(s):

The PGRO Processed Legume Panel have identified Varietal selection is an important and key element of crop production to ensure a programmed harvest period and to maintain high quality produce and require as accurate a guide to the performance of varieties in areas typical of pea production areas as possible.

An extension of the PGRO trials system to include an evaluation of the candidate commercial varieties at a site on a silt soil type in South Lincolnshire will add to refine the evaluation process, with additional information to supplement data from established trials.

Varietal characteristics affect:

- yield
- quality (colour, flavour, size and texture)
- ease of harvesting
- disease susceptibility
- timeliness
- ease of integration in the harvest programme

In addition, new varieties are being actively sought by growers so that they can meet processors specifications for quality with the most productive, reliable and cost effective varieties.

Several promising varieties have been tested in recent years and more information on their performance and relative maturity of varieties on a different soil type is needed. Work is needed over two years to gain experience in contrasting seasonal weather conditions.

Project objective(s):

The following Objectives are not independent and will be achieved:

- Information for the grower for new vining pea varieties sown on a light silt soil type in South Lincolnshire.

Specific objectives:

Currently varieties are evaluated at just one site at Thornhaugh with petits pois varieties being evaluated on a silt soil type in South Lincolnshire (trials funded by seedsmen) The soil type at Thornhaugh is representative of only a proportion of the national pea growing production area and varieties can often perform differently in other soil types and areas. The trial on silt soil type in S. Lincolnshire will give additional data to enable growers to make the appropriate variety choice.

1. Yield relative to a standard at TR100 and TR120
2. Maturity relative to a standard at TR100 and TR120
3. Size-grade specification
4. Haulm length
5. Standing ability at harvest
6. Disease susceptibility to downy mildew (*Peronospora viciae*)
7. Disease susceptibility powdery mildew (*Erysiphe pisi*)

**Note – this project was extended in July 2012 to allow for the repeat of the second year trials which had to be abandoned due to poor weather conditions.*

Further information

Email the HDC office (hdc@hdc.ahdb.org.uk), quoting your HDC number, alternatively contact the HDC at the address below:

HDC
AHDB
Stoneleigh Park
Kenilworth
Warwickshire
CV8 2TL

Tel – 0247 669 2051

No part of this publication may be copied or reproduced in any form or by any means without prior written permission of the Horticultural Development Company.

HDC is a division of the Agriculture and Horticulture Development Board.