

Fruit Production and Research in the UK



Table 1: Planted Area in the United Kingdom

(Hectares)

CALENDAR YEAR	2010	2011	2012	2013 Provisional	% Change 2012-13
VEGETABLES:					
Field	133,565	134,443	127,189	130,089	2.3
Protected*	691	687	755	818	8.4
Total Vegetables:*	134,256	135,130	127,943	130,907	2.3
FRUIT:					
Open	28,616	28,923	28,912	28,782	-0.5
Glasshouse	185	192	202	222	9.9
Total Fruit:	28,801	29,115	29,114	29,004	-0.4
GRAND TOTAL:	163,057	164,245	157,057	159,911	1.8

*Area of mushrooms excluded.

Chart 2: Total UK fruit area 1996 – 2013

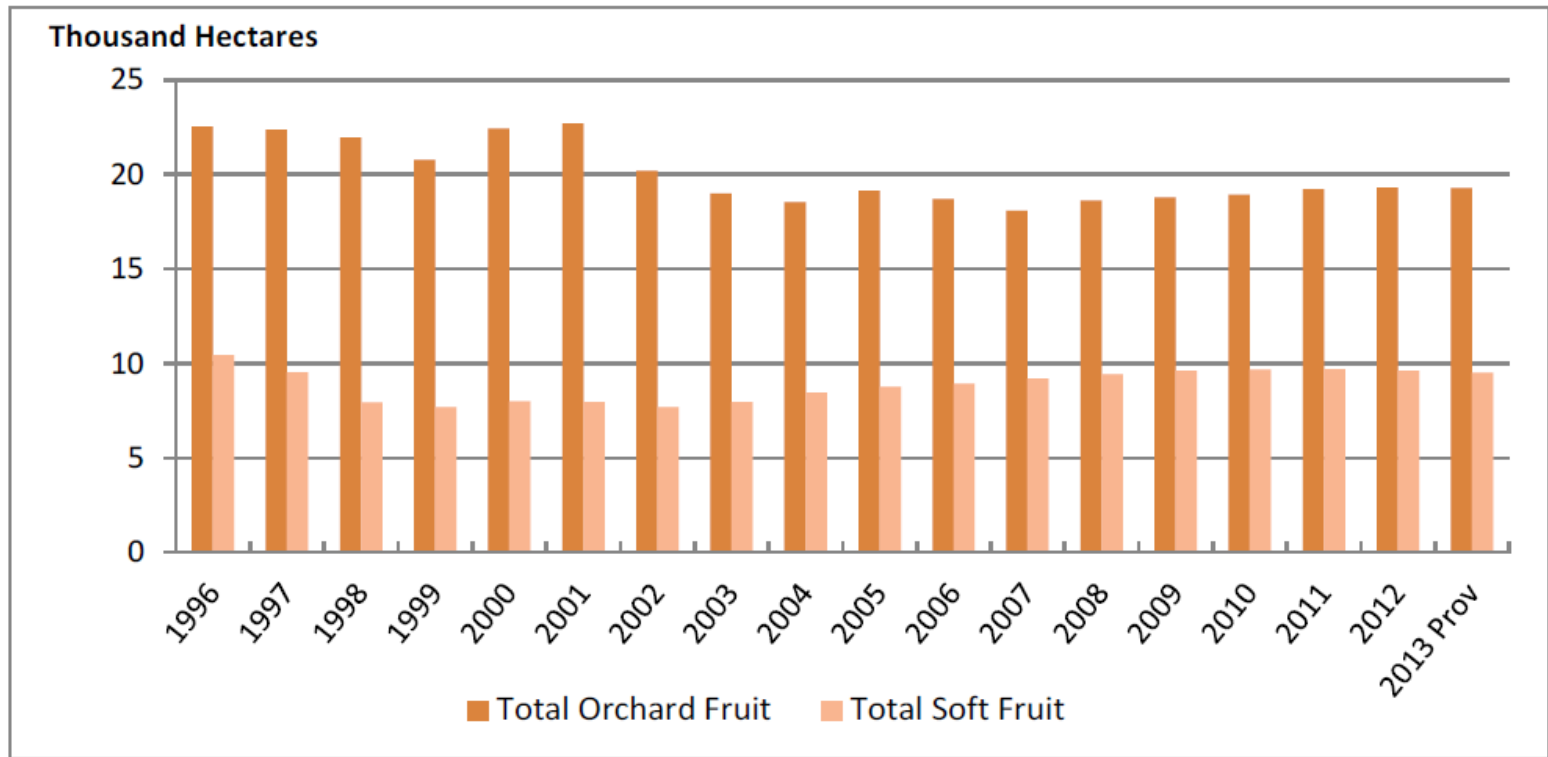


Table 2: Production and Total Home Production Marketed as a Percentage of Total Supply in the United Kingdom

(Thousand Tonnes)

CALENDAR YEAR	2010	2011	2012	2013 Provisional	% Change 2011-12
VEGETABLES:					
Home Production Marketed (HPM)	2,784	2,641	2,511	2,610	3.9
Imports*	1,884	1,988	2,050	2,225	8.6
Exports*	96	90	85	81	-4.3
Total Supply :	4,572	4,539	4,476	4,754	6.2
HPM as % of Total Supply	60.9	58.2	56.1	54.9	-2.2
FRUIT:					
Home Production Marketed (HPM)	424	429	370	389	4.9
Imports*	3242	3361	3421	3561	4.1
Exports*	143	150	110	147	33.3
Total Supply :	3,523	3,640	3,681	3,803	3.3
HPM as % of Total Supply	12.0	11.8	10.1	10.2	1.5

* Trade figures relate to fresh produce where distinguishable.

Excludes mushrooms & potatoes

Table 5: List of fruit crops covered by the statistics

Statistics	Fresh Fruit	Trade Data
Fruit Items	<p>Dessert Apples - Cox's Orange Pippin Worcester Pearmain Discovery Early Season Mid Season Desserts - (Egremont Russet, Red Pippin) Late Season Desserts - (Gala Jonagold, Braeburn, Jazz, Kanzi, Rubens, Zari)</p> <p>Culinary Apples - Bramley's Seedling Total Other Culinary</p> <p>Pears - Conference Others - (Williams Bon Chretien* and Doyenne Du Comice* and other) *Cider Apples & Perry Pears</p> <p>Plums - Victoria Other Plums (Marjorie's Seedling*, Pershore Yellow Egg* and damsons* and other)</p> <p>Others & Mixed - (*Cherries)</p> <p>Soft Fruit - Strawberries Raspberries Blackcurrants Other Soft Fruit - (Blueberries, Gooseberries, Blackberries, Logan- and hybrid berries, Red and White currants)</p>	<p>Apples Pears Cider Apples and Perry Pears Bananas Grapes Cherries Plums Peaches And Nectarines Other fruit with stones (Apricots, Sloes) Oranges Lemons and Limes Small Citrus Fruit (Clementines, Mandarins, Satsumas) Other Citrus Fruit (Grapefruit etc.) Dates and Figs Avocados Pineapples Melons (inc. Watermelons) Other Exotic fruit (Mango, Pawpaw/Papaya, Kiwifruit, Guava, Persimmon, Durian) Strawberries Raspberries Other Soft Fruit (Blackberries, Blueberries, Cranberries, Blackcurrants, Redcurrants, White currants, Gooseberries) Other Fruit (Quinces and all fresh fruit not covered above)</p>

*Are no longer recorded individually but historic data are available.

Fruit Researchers in the UK

- East Malling Research- independent, focus on perennial and clonal crops - now NIAB EMR
- James Hutton Institute- raspberries, blackcurrants
- Natural Resources Institute, University of Greenwich — tropical and temperate fruits, focus on crop protection and postharvest
- The National Fruit Collection, Brogdale
3,500 named Apple, Pear, Plum, Cherry, Bush fruit, Vine and Cob Nut cultivars. owned by Defra, University of Reading responsible for the curation and maintenance of the National fruit Collection with Farm Advisory Services Team (FAST)
- (Harper Adams University - National Centre for Precision Farming)



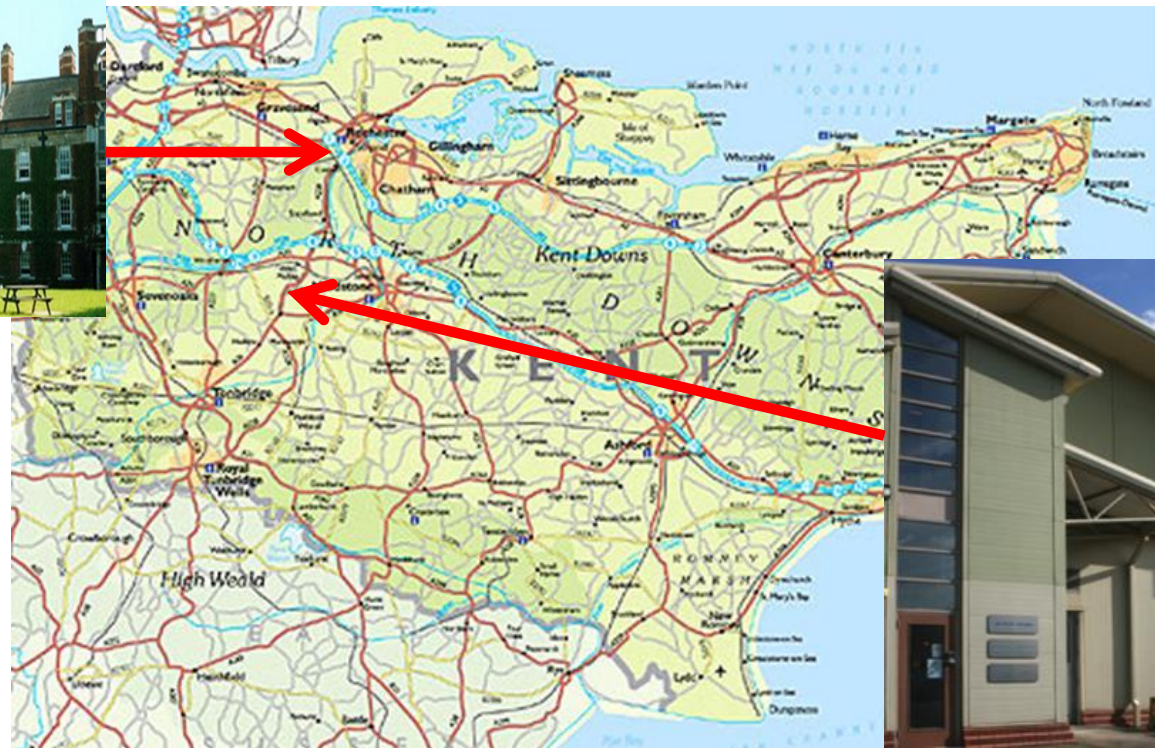
Produce Quality Centre

*Set up as a joint initiative between NRI, University of Greenwich
and NIAB East Malling Research*

Laboratory trials are carried out at two sites



UoG Medway
campus



Jim Mount facility East Malling

PQC research storage facilities



- Small, medium and commercial scale storage facilities.
- 10 temperature controlled stores
- Controlled atmosphere chambers individually controlled allowing wide range of conditions to be compared
- Facilities for produce quality analysis.
- Environmental monitoring (CO₂, O₂, ethylene, temperature, humidity)



Produce Quality Centre



- Food supply chains are becoming technically more challenging:
 - Populations become increasingly urbanised.
 - International trade in is perishables increasing.
- PQC provides support to NRI's work overseas by allowing us to remain at the forefront of an increasingly sophisticated technical area.
- PQC is increasingly providing technical support to UK fresh produce industry.
- PQC runs research projects on a wide commodity base ranging from basic through to applied.

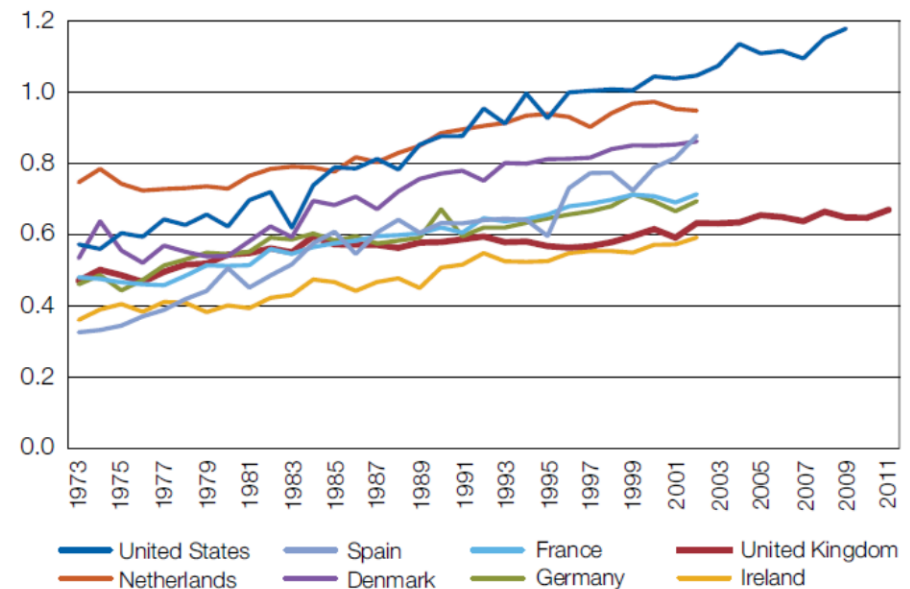
UK funding for Horticultural Research

- **Biotechnology and Biological Sciences Research Council (BBSRC):** Generally fundamental research. BBSRC Horticulture and Potato Initiative required 10% industry support (Funded projects focus on the high volume commodities)
- **Technology Strategy Board:** Most proposals to be led by industry and at least 50% of each project should be undertaken by industry
- **Horticulture Development Company (HDC) (part of Agriculture and Horticulture Development Board) (AHDB):** Levy Body, with research priorities set by growers.
- **Commercial:** e.g. Sainsbury's Agriculture Research and Development Grant
- **DEFRA** (*Agritech strategy*)

Agritech Strategy (DEFRA)

- *“the first time that industry and Government have identified agri-tech as an economically distinct sector.”*
- *“The infrastructure to support industry in applying science and technology to help modern farming and food production has declined over the past 30 years. UK agriculture’s productivity growth has declined relative to our major competitors.”*

Figure 1 Total factor productivity in agriculture for selected countries relative to the United States 1996 level (indexed)



Source: Department for Environment, Food and Rural Affairs (Defra)

Agritech

- £70 million Government investment in an Agri-Tech Catalyst single fund for projects, all the way from the laboratory to market . (£10 million to deliver international development objectives)
- £90 million of Government funding for Centres for Agricultural Innovation

Centres for Agricultural Innovation



Rothamsted Research, the University of Reading, Scotland's Rural College (SRUC) and the National Institute of Agricultural Botany (NIAB)

Centre for Crop Health and Protection (CHAP) - £21.3 CHAP

Centre for Innovation Excellence in Livestock (CIEL) - £29.1

Agricultural Engineering Precision Innovation Centre (Agri-EPI) - £17.7





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