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## MUSHROOM PRODUCTION AREA 2010 ENGLAND

The latest National Statistics produced by Defra from the 2010 Mushroom Survey were released on 28 July 2011 according to the arrangements approved by the UK Statistics Authority. This release shows the total production area and quantity of compost used for growing mushrooms during 2010.

The survey was last run in 2007 and runs roughly every three years to meet EU Structure Survey requirements (EC 1166 2008). The survey is sent to all holdings who have previously indicated that they grow mushrooms and in 2010 responses were received from 100% of holdings. Defra is extremely grateful to all farmers who completed the Mushroom Survey.

The key results are given below.

### Key results

- The production area of mushrooms has decreased since 2007 from 126 to 86 hectares.
- There has been a steady declining trend in the area of mushrooms since 2004 due to a reduction in the number of mushroom growers as they have struggled to compete with other countries.

**Table 1: Total production area and quantity of compost used for growing indoor mushrooms in 2010**

	2004	2005	2007	2010	% change 2010/2007
Compost used (tonnes)	190 742	184 469	162 726	91 320	-44
Production area <sup>(a)</sup> (hectares)	160	153	126	86	-32
Number of growers	56	35	43	31	-28

(a) The production area is the total area used to grow mushrooms in a year, i.e. the area of a single crop multiplied by the number of crops harvested in a year.

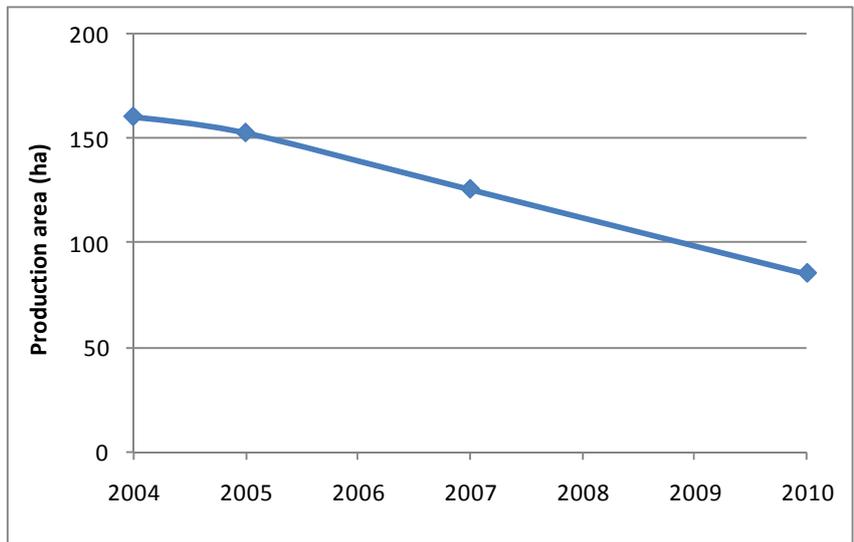
**Enquiries on this publication to** Farming Statistics, Department for Environment, Food and Rural Affairs. Tel: 01904 455332, email: [farming-statistics@defra.gsi.gov.uk](mailto:farming-statistics@defra.gsi.gov.uk).

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## Detailed results

The Mushroom Survey collects data on all mushrooms grown under cover in England. Results in this release are for all mushrooms, with white mushrooms (*Agaricus Bisporus*) accounting for the majority of the total.

**Figure 1: Production area of indoor mushrooms in England 2004 to 2010**



The area of mushrooms decreased by 32% between 2007 and 2010, following the steady declining trend seen since 2004 as figure 1 shows. The area devoted to mushroom production has decreased by 46% since 2004 and the compost used has more than halved. These decreased figures are thought to be down to the reduction in the number of mushroom growers in recent years due to increasing competition from abroad.

**Figure 2: Imports of mushrooms into the UK 2001 to 2010**

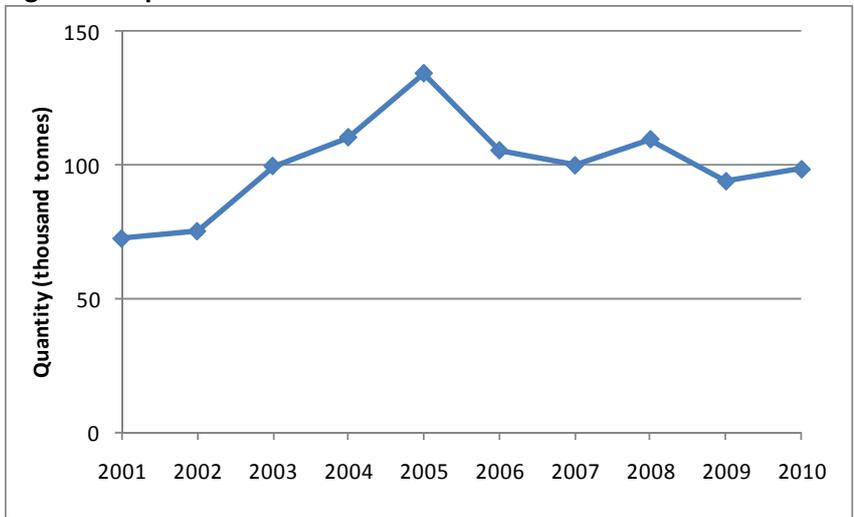


Figure 2 shows that the quantity of mushrooms imported into the UK almost doubled between 2001 and 2005, which could explain the reduction in the number of English mushroom growers. Imports spiked again in 2008, which has led to the reduction in the English mushroom area between 2007 and 2010.

Source: HMRC

## Data uses

- Data from the Mushroom Survey are collected primarily for the EU Structure Survey under regulation EC 1166 2008.
- The mushroom data are used to help calculate standard outputs, which define farm type classification.



## Methodology

Survey forms were sent to all 82 Defra registered holdings believed to grow mushrooms under cover in 2010. These included holdings who indicated that they grow mushrooms on their June 2010 Census form, those who said they grew mushrooms in the 2007 survey and any non-respondents from 2007. We also identified a small number of holdings on our register with 'mushroom(s)' in their farm name, suggesting that mushrooms may be grown there. We received responses from 100% of holdings.

## Data analysis

Data were collected on the total quantity of compost used in tonnes during 2010 at each phase of mushroom production and for three different methods (bags, shelves and other). A copy of the survey form can be found in Annex I.

The quantities of compost were summed for each phase of each production method. A set of standard conversion factors were then used to convert the tonnages into areas in hectares, as shown in table 2. It must be noted that these conversion factors rely on a number of assumptions that may not hold for all growers.

**Table 2: Quantity of compost required per hectare by phase and production method**

	Tonnes per hectare		
	Bag	Shelf	Other (including block and tray)
Phase I	2 020	1 549	1 482
Phase II	1 465	1 123	1 074
Phase III	1 318	1 011	967

## Accuracy and reliability of the results

The 2010 Mushroom Survey was sent to all holdings registered with Defra and a 100% response rate was achieved. However, there may be other mushroom growers in England who are not registered with Defra. This means there could have been some under coverage in the survey and the total compost used could be an underestimate.

The conversion factors in table 2 rely on a number of assumptions that may not hold for all mushroom growers. Therefore there is some degree of uncertainty in the total area of mushrooms.

### ***Other survey results and next publications due***

- The total area of mushroom sheds was published in the 2010 June Census results available at: <http://www.defra.gov.uk/statistics/foodfarm/landuselivestock/junesurvey/>.
- Data on the quantity and value of home production marketed mushrooms can be found in the Basic Horticultural Statistics publication at: <http://defra.gov.uk/statistics/foodfarm/landuselivestock/bhs/>.
- The next mushroom survey will run as part of the 2013 Structure Survey.
- Results from all the Defra farming surveys can be viewed on the Defra website via the following link: <http://www.defra.gov.uk/statistics/foodfarm/>. This also contains details of future publication dates and datasets from previous surveys.



# defra

Department for Environment  
Food and Rural Affairs

If there are any amendments or corrections to details opposite, please write them in this box

Name:

Address:

Postcode:

Telephone number:

(including national dialing code)

## 2010 Mushroom Growers Survey

Dear Sir/Madam

You are invited to take part in the 2010 Mushroom growers survey. I would be very grateful if you would complete this form in respect of the holding named above and return it in the pre-paid envelope provided. In order for us to produce accurate results quickly, I would appreciate it if you could return your survey form within two weeks.

This survey is being sent to mushroom growers so that Defra can estimate the level of production in England in 2010. We believe that your holding may be a current mushroom producer and I am therefore writing to ask for your assistance in collecting the data. If you did not grow mushrooms in 2010, please help us to amend our records by completing sections 1, 2 and 4 overleaf and returning the form.

The results of this survey are used to meet European Community requirements. Results will be published in April 2011 on the Defra website at <http://www.defra.gov.uk/evidence/statistics/foodfarm/landuselivestock/index.htm>.

### Data Protection

Any information you provide to us is treated in confidence. Defra is the Data controller in respect to the Data Protection Act 1988. The purposes for which it can be used are set out in full in our data protection statement (available at [www.defra.gov.uk/evidence/statistics/natstats/confidentiality.htm](http://www.defra.gov.uk/evidence/statistics/natstats/confidentiality.htm) or call the helpline number below to receive a copy).

We greatly appreciate the time and effort you spend completing our survey forms. Thank you for your assistance.

Yours faithfully

Jennifer Tickner  
Farming Statistics Team.

**Defra has launched an online news alerts service for you to keep up-to-date with the latest farming news, replacing the Farming Link magazine that you have received previously. Sign up at [www.defra.gov.uk/farminglink](http://www.defra.gov.uk/farminglink) to receive monthly emails alerting you to news, upcoming events, consultations and other key dates.**

Official Use Only

Name/Address	
Comments in box	
Comments elsewhere	

CSS930 (Rev 12/10)

**If you require a large  
print form please  
contact us on  
01904 455284**

**For help with completion of the form contact us at:**  
Department for Environment, Food and Rural Affairs  
Economics and Statistics Programme,  
Room 312, Foss House, Kings Pool,  
1-2 Peasholme Green, York YO1 7PX  
**Helpline: 01904 455284** Mon-Fri 8.30am to 4.30pm  
**Email: [surveys@defra.gsi.gov.uk](mailto:surveys@defra.gsi.gov.uk)**  
**Web: [www.defra.gov.uk](http://www.defra.gov.uk)**

## Section 1

Did you grow mushrooms commercially in 2010? Yes  1 No  2 No, but will in future  3 A3  
 If No, please go to section 3 ↩

What species of mushrooms did you grow in 2010?

Tick all that apply

Agaricus Bisporus .....  A4

Other mushroom species .....  A5

Please specify

A6

## Section 2 - Production Method and Compost Usage

Please complete the table below, entering the quantity (in tonnes) of compost used for each type of production in 2010

	Bag		Shelf		Other (includes block and try)		
Phase I		A7		A8		A9	Tonnes in 2010
Phase II		A10		A11		A12	Tonnes in 2010
Phase III		A13		A14		A15	Tonnes in 2010

## Section 3 - Declaration

I declare the information I have given in this return to be correct and complete to the best of my knowledge and belief.

Signature

V3

in minutes

Time taken to complete the form

V1

Name (please print)

Telephone number

Date

Any other comments

T99

Please now return this form in the enclosed pre-paid envelope.

**Thank you for taking the time to complete this survey**

**Results will be available from April 2011 and can be accessed via the DEFRA website:**

**<http://www.defra.gov.uk/evidence/statistics/foodfarm/notices/index.htm>**

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