Grower Summary

CP 100

Tracking Peat usage in Growing Media Production

Annual 2014

Disclaimer

The results and conclusions in this report may be based on an investigation conducted over one year. Therefore, care must be taken with the interpretation of the results.

Use of pesticides

Only officially approved pesticides may be used in the UK. Approvals are normally granted only in relation to individual products and for specified uses. It is an offence to use non-approved products or to use approved products in a manner that does not comply with the statutory conditions of use, except where the crop or situation is the subject of an off-label extension of use.

Before using all pesticides check the approval status and conditions of use.

Read the label before use: use pesticides safely.

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

Project Number:	CP 100
Project Title:	Tracking Peat usage in Growing Media Production
Project Leader:	David Denny, HTA
Contractor/(s):	Horticultural Trades Association
Industry Representative:	Wayne Brough, HDC
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Further information

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GROWER SUMMARY

Headline

Between 2011 and 2013 the volume of growing media sold by manufacturers in the UK (including export sales) fell by 18%. The fall between 2012 and 2013 was 8%. Volumes for professional use in 2013 fell by 14% compared with 2012 and those for amateur use fell by 5%.

Across all sectors of the growing media market the proportion of volume accounted for by peat has fallen over the years of the study so far. The use of wood-based and coir ingredients has increased consistently with bark and green compost accounting for broadly similar proportions of volume.

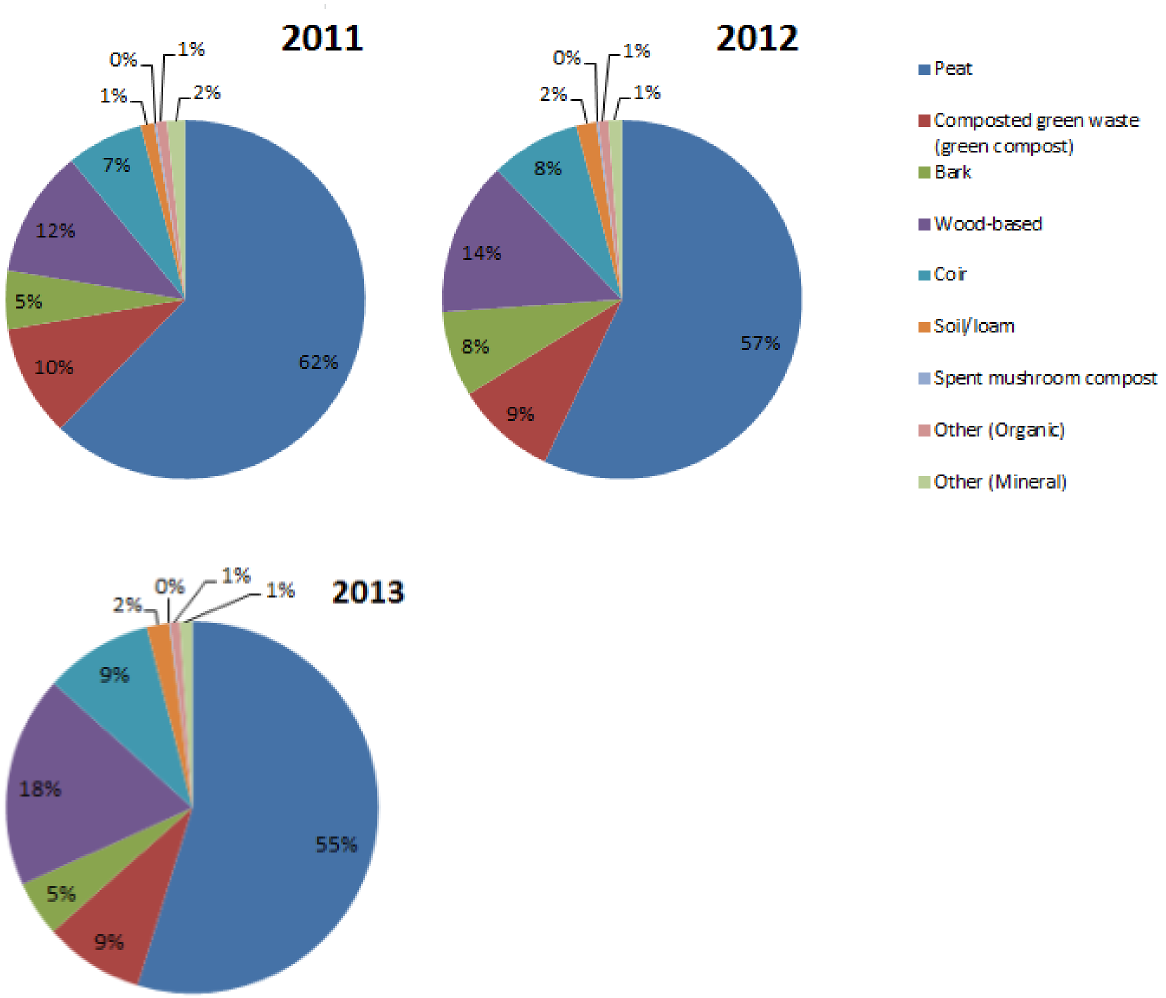

Figure 1:Summary of the proportion of overall growing media supply accounted for by different ingredients.

Background

The overall aim of this project is to provide objective information of benefit to multiple stakeholders on the use of peat in UK horticulture. The research aims to measure the volume (cubic metres) of growing media (and associated volume of peat) sold by producers in the UK and for export from the UK. The project also aims to provide information on relevant trends from 2011 to 2014.

The project will provide data to the industry and other stakeholders on changes in the use of bulky components of growing media including peat over time. It will inform the Growing Media Panel on the uptake of responsibly sourced growing media by the various horticulturehorticultural and retail sectors.

The data collection is based on information submitted by growing media manufacturers which account for the majority of UK growing media supply, whether for amateur or professional use or export. Data[1] on 2011 was collected from manufacturers between October and November 2012. Data on 2012 was collected in February and March of 2013. Data on 2013 was collected in February and March of 2014. This report is based on these three initial waves of data collection in the project.

Previous work has been conducted by Defra to monitor the composition of growing media. The latest data available from this project relate to 2009. Differences in the sampling and methodology of these two studies mean that data are not directly comparable. However as part of the data checking for information gathered in this project the figures on the peat content of growing media have been cross referenced against data in the Defra project to 'sanity check' that the figures are broadly in line with what might be expected.

Summary

Overall sales trends 2011 to 2013

UK growing media supply for domestic use and export fell by 8% in volume overall in 2013 compared with 2012. In volume terms this equates to a fall from 3.95 m cubic metres to 3.65 m cubic metres. In terms of growing media supplied for retail (amateur use), volumes fell by 5% from 2.69 m cubic metres to 2.55 m cubic metres. For professional use the equivalent figures are a 14% fall, with volumes falling from 1.2 m cubic metres in 2012 to 1.0 m cubic

[1] See appendix for a copy of the form used for data collection.

metres in 2013. Production for export accounts for a very small proportion of overall supply (1.5% in 2013).

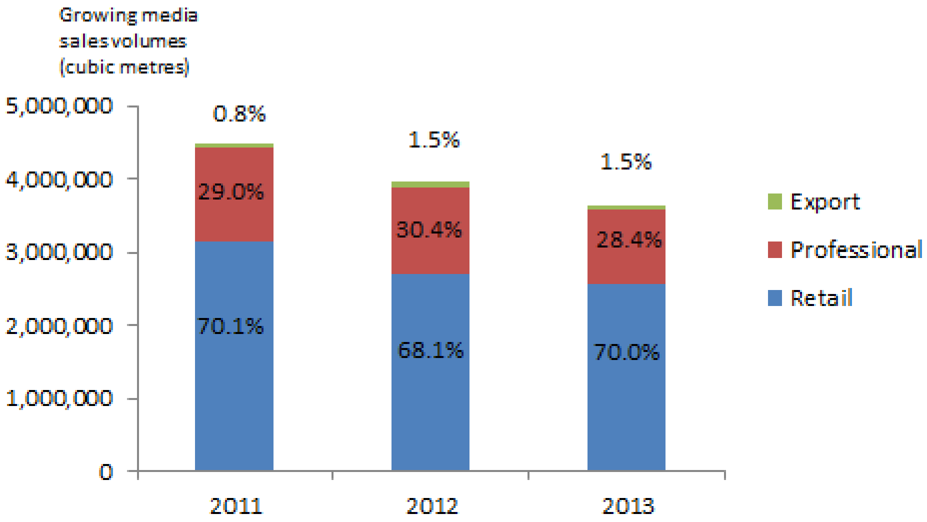

Figure 22: Proportion of volume in growing media which goes to the retail, professional and export markets 2011 and 2013[2]

Overview of growing media supply for the retail market

As noted, the volume of growing media supplied to the UK retail market fell by 5% in 2013 compared with 2012. Within this, the 'mix' of ingredients used for all types of growing media product changed. Overall peat and green compost[3] accounted for a lower proportion of the volume produced in 2013 than in 2012. The proportion of volume accounted for by wood-based ingredients in particular increased from 15% in 2011 to 18% in 2012 and reached 23% in 2013. The proportion accounted for by coir also increased from 4% in 2011 to 6% in 2012.

The following charts show the change in volume (in cubic metres) of the different ingredients used in growing media for the retail market and the change in the proportion of total growing media supply accounted for by different ingredients.

[2] Note – figures do not total 100% in all cases due to rounding
[3] The term 'green compost' is used throughout this report to denote composted green waste.

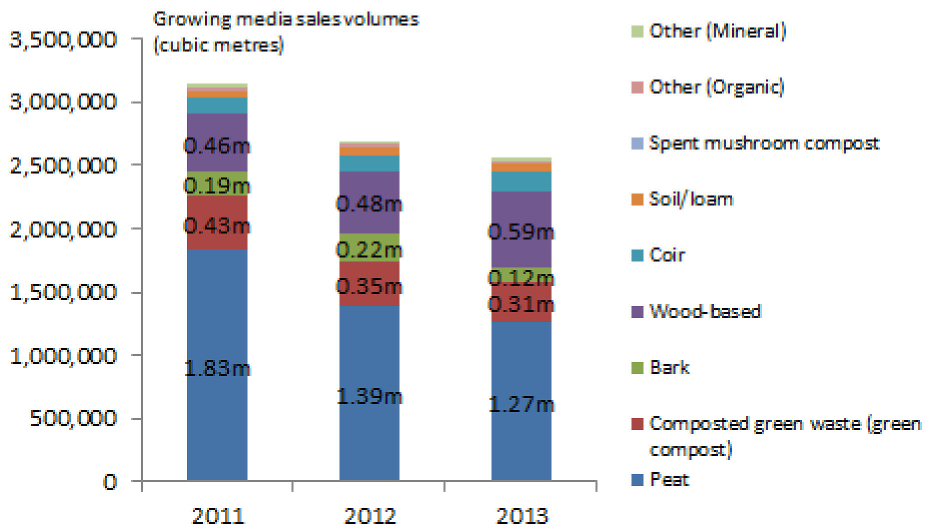

Figure 33: Volume in cubic metres of ingredients used in the growing media supply to the retail market 2011 to 2013

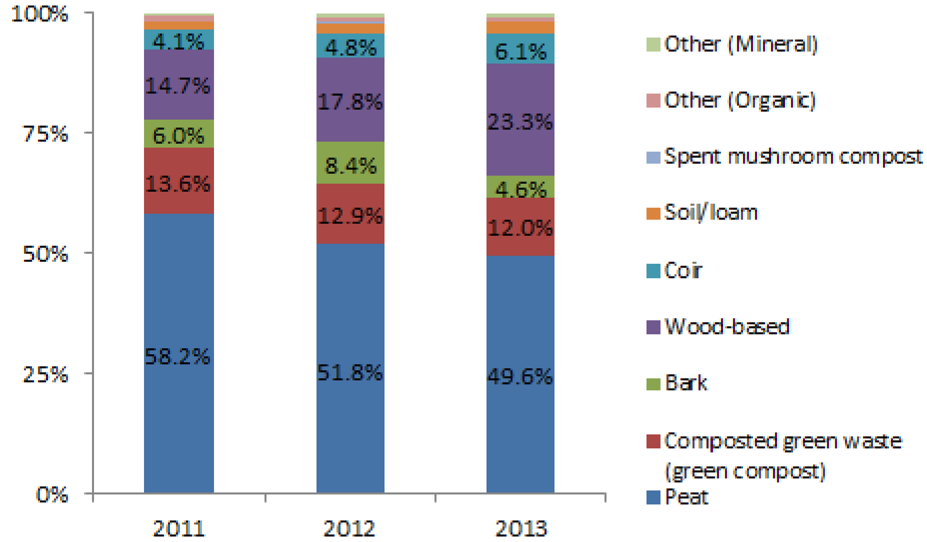

Figure 44: Proportion of ingredients used in the total growing media supply to the retail market 2011 to 2013

In both absolute and proportion terms, peat use in growing media manufactured in the UK for the UK retail sector fell, as did green compost. Wood-based and coir ingredients have increased in terms of the proportion of the mix they account for. Bark has fallen back in terms of the proportion of volume it accounts for after a rise in 2012.

In terms of the different growing media products supplied for the UK retail market, there were some shifts. Within growing media containing peat, multi-purpose growing media increased its share of overall volumes supplied for UK retail consistently between 2011 and 2013 from 71% of volume in 2011 to 81% of volume in 2013. Peat-free growing media accounted for 9% of total volumes of growing media supplied into retail, a very similar but slightly reduced proportion when compared with 2012. This compares with 2011's 6% figure. The proportion of volume accounted for by retail peat stayed at approximately similar levels to 2012, accounting for less than 1% of volume supplied to the sector.

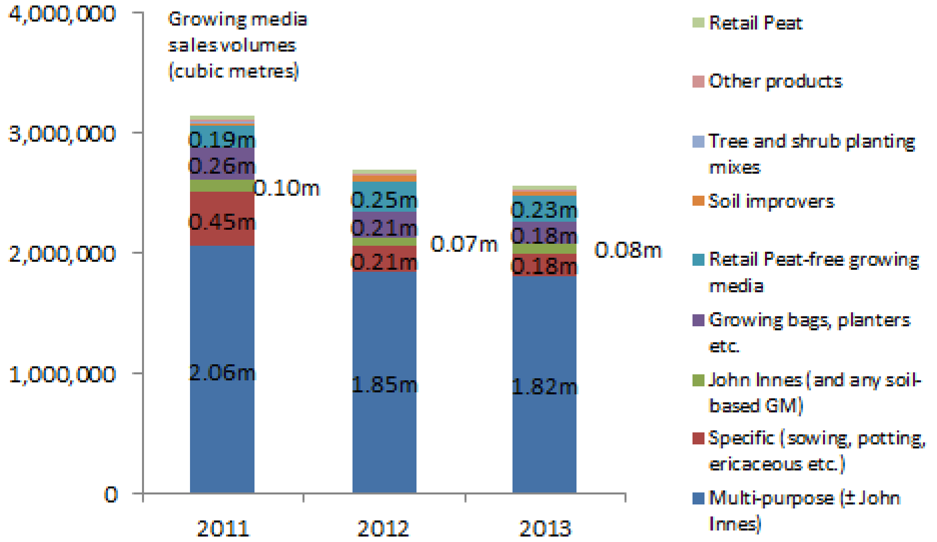

Figure 55: Volume of different growing media products supplied to the retail market 2011 to 2013

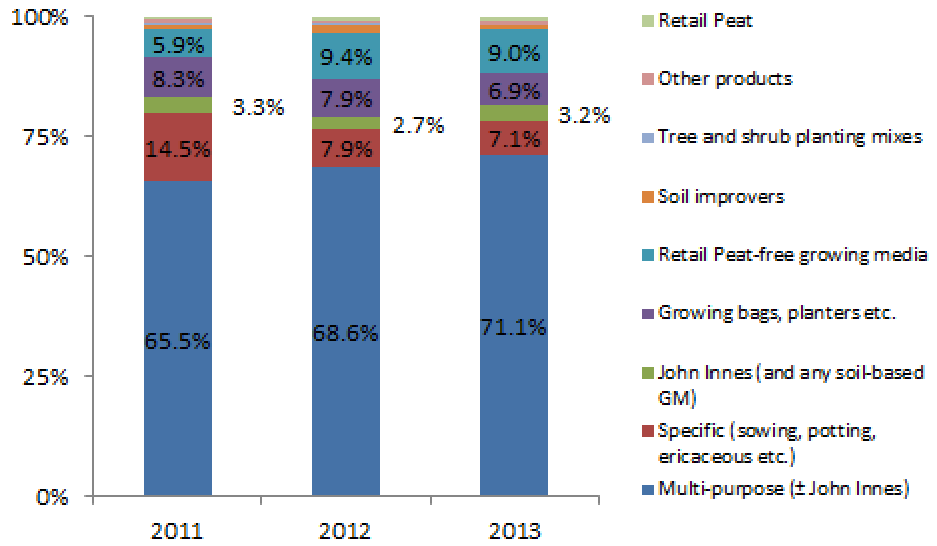

Figure 66: Proportion of overall volume of supply to the retail market accounted for by the different types of growing media product 2011 to 2013

Between 2011 and 2013 there has been a movement away from peat in growing media for amateur use. This shows itself both in the proportion of volume supplied that was made up of peat, and the proportion of production accounted for by peat-free growing media. The volume of product composed entirely of peat (e.g. peat bales) for retail has stayed roughly consistent at less than 1% of total volume supplied for retail.

Overview of growing media supply for the professional market

The volume of growing media supplied for professional use fell in 2013 by 14% compared with 2012 (1.2 m cubic metres compared with 1.0 m cubic metres). As in the retail market, the proportion of growing media volume made up of peat fell, whilst the proportion made up of bark, wood-based and coir increased for the second year in a row.

The following charts show the change in volume (in cubic metres) of the different ingredients used in growing media for the professional market and the change in the proportion of total growing media supply accounted for by different ingredients.

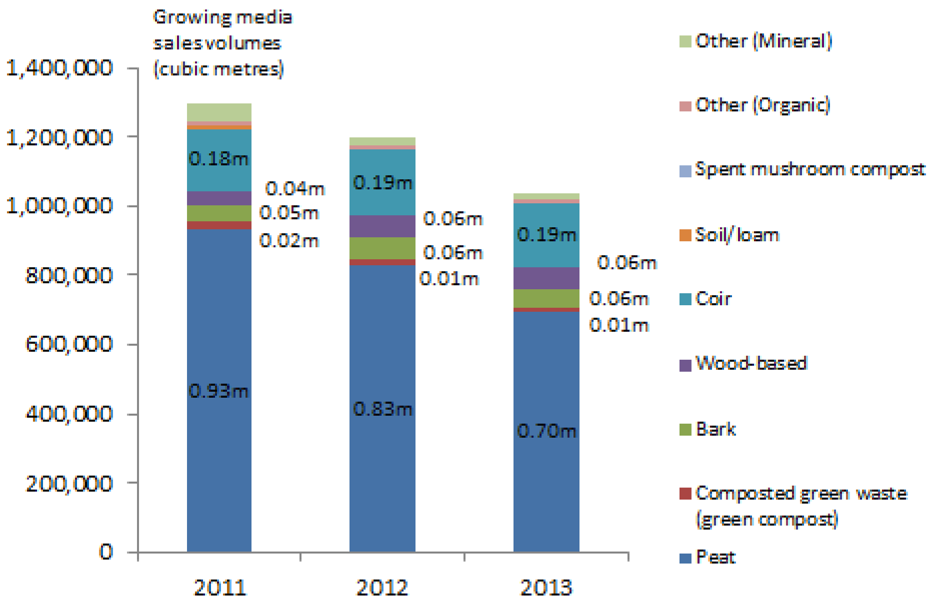

Figure 77: Volume in cubic metres of ingredients used in the growing media supply to the professional use market 2011 to 2013

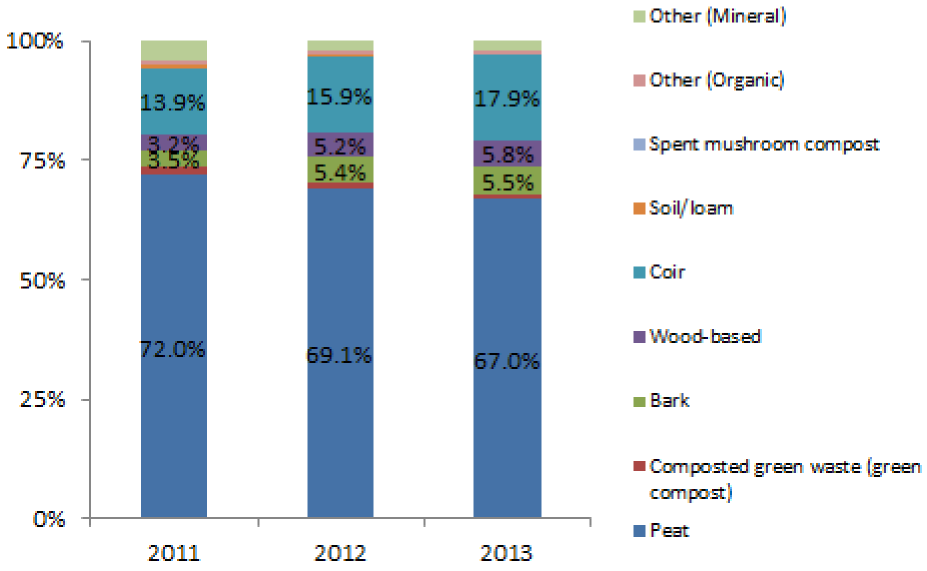

Figure 88: Proportion of ingredients used in the total growing media supply to the professional use market 2011 to 2013

As in the retail sector, peat use fell, while the use of wood-based, coir and bark ingredients increased. Coir now accounts for a much greater proportion of the volume supplied into the professional market than into the retail market (17.9% compared with 6.1%). Indeed growing media for professional use (compared with growing media for retail use) relies much more on peat and coir. In the case of growing media supplied for professional use, 85% of the volume is made up of peat and coir. The corresponding figure for growing media supplied into the retail market is 56%.

In terms of the type of products supplied into the professional grower market, the proportion of the volume accounted for by mixes for bedding plants, pot plants and nursery stock increased consistently over the three years of the study to date. The proportion of the volume supplied accounted for by peat-free growing media increased in 2013 to 16.7% from 14.7%, albeit this is still a lower proportion of the overall volume than in 2011 (17.4%).

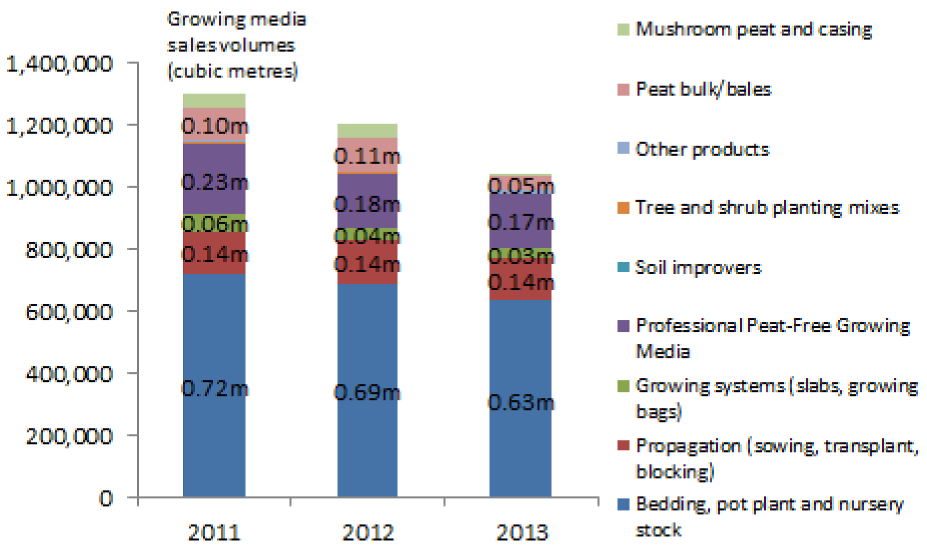

Figure 99: Volume of different growing media products supplied to the professional use market 2011 to 2013

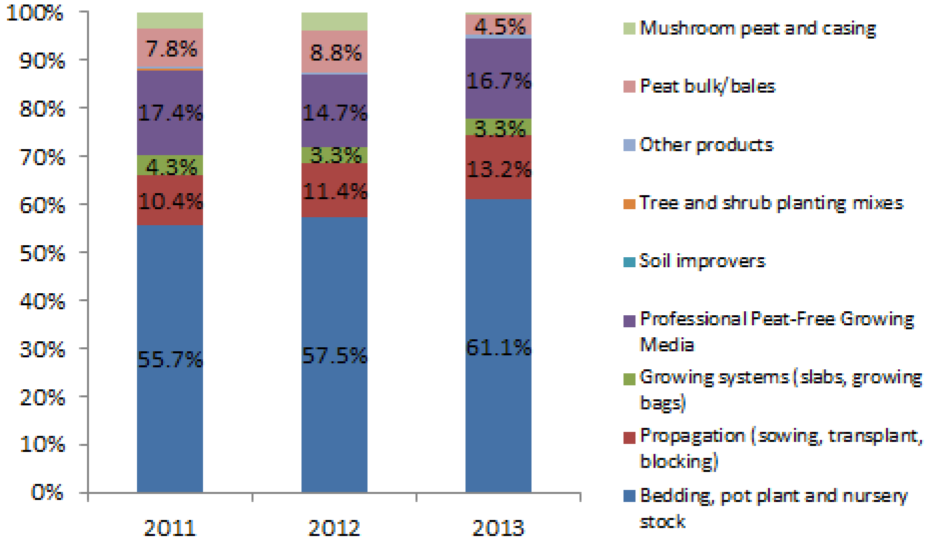

Figure 1010: Proportion of the overall volume of supply to the professional use market accounted for by different types of growing media product 2011 to 2013

The data collection form that the manufacturers completed asked them to provide separate volume figures for growing media for bedding and pot plants, and nursery stock. Respondents did this based on the specific mixes supplied, which tend to have very different ingredients in terms of the controlled release fertilisers and other components designed for these specific crops. From a manufacturer's point of view they are easily distinguishable. A sector attribution was also reported in Defra statistics[4], but based on a different methodology. In summary, the approach used was to take Defra crop production statistics (e.g. the numbers of plants of different types produced), and estimate volumes of growing media that would be required to produce these volumes.

The two methodologies produce different, in fact almost opposite results from each other for the sectors in question. The Defra statistics consistently reported a greater volume of growing media used in nursery stock production, while the data collection for this study showed a greater volume used in bedding and pot plant production. Given the inconsistency between the two sets of figures, further investigation is taking place to understand why the two figures are at odds, and to identify any risks and assumptions in either data set that should be considered when using them. For this reason an aggregate figure only is published in this report. However the split is available on request on a provisional basis, and we expect to be able to publish the figures on a formal basis along with a detailed discussion of the 'pros'pros' and 'cons' of each method in the final edition of this report in 2015 when more data is available.

Overview of peat sources for growing media (amateur, professional and export use)

The following chart shows that the volume of peat from different countries which was included in 2012 growing media sales fell in comparison to 2011. This is in line with the overall falling sales volumesvolume of growing media. The exception to this was peat sourced from outside the UK and Republic of Ireland, whichremained at a relatively constant volume in contrast with falling volumes of peat sourced from within the UK and Ireland.

[4] *Defra report SP08019 - Availability and supply of alternative materials for use in growing media to meet the UKBAP target on reduced peat use in horticulture*

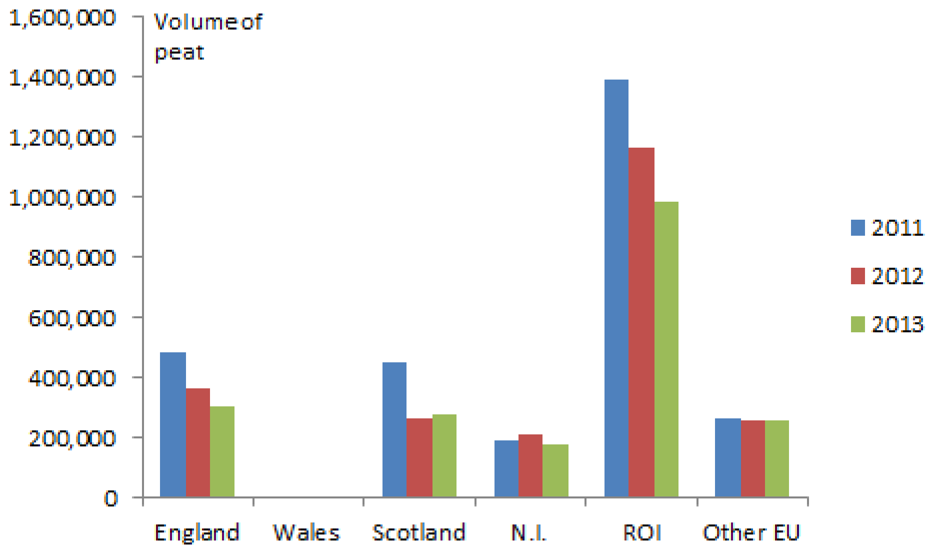

Figure 1111: Volume of peat sourced from different countries for UK growing media sold 2011 to 2013

A third year of data has permitted the correlation between rainfall and the proportion of the subsequent year's growing media volume which is accounted for by peat to be examined. The following chart shows the proportion of peat in overall volumes of growing media (red line) and the total amount of rainfall in the preceding year (blue) between May and September (inclusive) the main peat harvesting months. The chart shows an inverse relationship between the two:, as the amount of rain increases the percentage of growing media volume accounted for by peat decreases. This is probably a result of the wet weather conditions adversely affecting the making peat harvest, difficult resulting in a need to cover any shortfall with other materials.

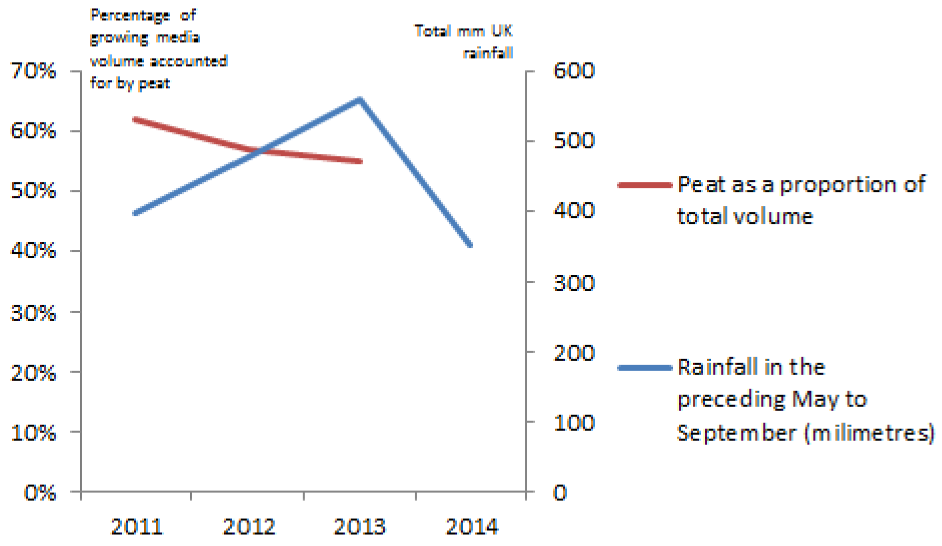

Figure 1212: Correlation between peat as a proportion of growing media supplied with rainfall in May to September of the preceding year

Financial benefits

The scope of this specific data gathering project does not include the provision of recommendations relating to cost reduction or financial return on investment. Such recommendations and analyses are being prepared in other work streams of the Growing Media Panel.

Action points

Growers can use the information prepared in this report to monitor the overall use of peat and non-peat based growing media within the industry and benchmark their own business use of growing media against it.