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## **Horticulture Development Company response to the Defra consultation on reducing the horticultural use of peat in England**

*The HDC formal response consists of the Chairman's forward (below), a response to each of the questions set in the Defra peat consultation document, a number of grower case studies from a range of sectors using growing media, a spreadsheet summary of the estimated current use of peat and peat alternatives by each horticultural sector and a brief list of further technical recommendations.*

### **HDC Chairman's Forward**

The UK horticultural industry like many other EU horticultural sectors represents a strongly competitive sector of the economy as a whole. It provides significant numbers of full and part time jobs and provides strong links with many services such as transport, food added value products and catering, which increase the value to the nation. In a report published in September 2009 'The horticultural industry in the East Midlands' employment in horticulture alone was shown as almost 18,000 persons, which fits well with the LANTRA figure of over 67,000 people being employed in the industry (*Skills Foresight 2000*). The farm gate value of the horticultural sector is worth at least £3.1billion to the nation.

The importance of the industry to the nation's wealth and ability to move closer to food sustainability from homeland production must not be underestimated. Sadly the current UK consultation on the horticultural use of peat, in anticipation of a forthcoming white paper, uses flawed assumptions on peat use and the affect on the environment in a wholly negative fashion.

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The data sets used to draw the conclusions in the accompanying Impact Assessment are transparently flawed and have been demonstrated to be so and at best are supported by a paucity of real data and rely in many instances on 'anecdotal evidence'. At the current time the Netherlands is holding a consultation on '*Enhancing the sustainability of the peat supply chain for Dutch Horticulture*'. This report embraces the '*Strategy for responsible management of peats*' facilitated by the International Peat Society as an important tool in achieving its goals. Such information is completely missing in the UK consultation.

In the UK consultation there has been no recognition given to the huge strides the horticultural industry has made in the last 20 years to reduce its reliance on peat and at the same time develop very much more advanced substrates for specific uses, generally at a cost to the entire industry itself. Interestingly the estimated use of peat by commercial growers in 1990 was 1.2 million m<sup>3</sup> and the figure from the Defra survey on peat use even up to 2009 showed that in fact this quantity of peat had not expanded but overall had contracted and yet the industry has developed and flourished since 1990.

The accompanying spreadsheet clearly demonstrates how the industry is seriously engaged with the development of new and better sustainable substrates based on the use of a limited number of additives. In 1990 the industry reported on the use of upwards of 30 possible additives to peat, but are now only using three to four regular dilutants and even then some of these key additives are fragile in their supply.

As a specific example, coir is a waste from the coconut industry, mainly imported from the Far East. China's demands for increasing food and ornamentals production is rapidly absorbing the supplies, added to which there is a serious limitation to the sheer volume of coconuts harvested, as this is all done by hand and there are insufficient people to undertake the task. We are also mindful that we do not want another 'palm oil' situation where vast areas are cleared to produce a mono-crop at the expense of the existing bio-diversity of the region. Even the continuity of woodchip for wood-fibre production is threatened by the increasing demand for 'home' burning of timber for heating and the competing uses of materials for bio-fuel generation.

The horticultural industry has to be interested in three factors, quantity, quality and consistency of supply of the raw materials it uses to produce crops. Only when these three criteria are satisfied can the industry hope to make improvements in the consistency and quality of its own production and significantly reduce its wastage and hence improve its production ability by reducing its costs.

The industry fully appreciates its impact on the environment both in sourcing raw materials and reducing its wastage. This has been clearly demonstrated in its development of sustainable substrates which it now uses and continues to research for even greater savings in the future. The industry continues to work with substrate manufacturers and suppliers to develop added value mixes which enhance the productivity of the industry as a whole.

Given the paucity of reliable data presented in this current consultation the professional grower industry considers that the targets and timetable are in their expert opinion unattainable, but will continue to reduce the wholesale use of peat from wherever and make use of all additives and substitutes it can in order to bring improved and added value mixes into use. The industry will look with considerable interest at the rational

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debate in other EU countries and adopt similar well researched conclusions which help to add to the security of the UK horticultural industry and wealth of the nation as a whole.

Yours sincerely

**Neil Bragg**

A handwritten signature in black ink, appearing to be 'Neil Bragg', written in a cursive style.

**HDC Chairman**

## **Defra consultation on reducing the horticultural use of peat in England**

### **Response from the Horticultural Development Company to the questions posed within the consultation document**

#### ***Question 1: Do you support the rationale for taking action to reduce the horticultural use of peat?***

As described within the Defra consultation document there are numerous environmental reasons for reducing peat extraction, bearing in mind that the horticultural use of peat only accounts for part of the total peat extracted. While there is a definite requirement to protect the environment whilst addressing the commercial needs for peat extraction, any plan to reduce the horticultural use of peat needs to be part of a larger plan to preserve peat areas from extraction and degradation for other reasons. UK horticulture must not be viewed in isolation as a special case.

As a general rationale, HDC levy payers and associates accept that it is prudent to audit the use of all materials associated with their industry, whether the material in question be peat or some other input. However, there are many key questions which need to be addressed as part of the solution. These include:

1. Who shares the costs of the move away from peat use in the future?
2. Can continuous supplies of quality raw material for peat alternatives be sourced from the UK and overseas to meet the needs of the industry when such material will be required by other industries and countries?
3. Will a unilateral move by the UK to a peat-free status within the EU simply jeopardize the horticultural and growing media industries within the UK as a consequence?

As a further crucial point under the last issue, there appears to be a lack of focus about how the policy will extend to peat sources beyond the influence of Defra. The targets as set in the consultation appear to cover all peat sources (including Irish and Baltic) but it is not explained within the documentation how the process will actually be implemented in the case of the 68% of peat imported into the UK and whether simply banning the importation of this peat would be achievable from a legal point of view.

#### ***Question 2: Do you agree that a better supported, industry-led voluntary approach is the right way forward?***

Yes, a voluntary approach with support from all parts of the horticultural and growing media industries will be the best way forward. However, the success of the approach will be determined by how much input industry is permitted at the start of the consultation process, what the agreed target actually is, what support (to whom and in what form) will be provided by Government to aid the transition and how the process and subsequent developments are actively communicated to the industry.

It is particularly important that all retailers are involved in this process and that they and Government are prepared to support financially the moves to the development of a sustainable UK horticulture supply base.

**Question 3: Do you agree that these are the core criteria that should guide the development of a future policy framework?**

The eight bullet points listed in the Defra consultation document are all important elements for consideration within future policy framework. The *clear long term goal* should be an *'agreed realistically achievable target'*; goals, though useful to set the general level of attainment, can have a negative effect if they are not achieved or cannot be achieved in the timescale set, as occurred with the 90% peat reduction target set for 2010. Paragraph 10.6 in the impact assessment appears to confirm the unachievable timescales - *'Preliminary analysis suggests that if phasing out of peat is prioritized in the amateur market the professional market would not be supplied with sufficient alternatives until after 2030'*.

It would be useful to indicate who will set the *roles and responsibilities of each group*, is this to be set by Government alone or with the help of some other group?

A move to *volume-based targets* would be logical and would make the monitoring of future developments more straightforward to assess, though some caveat needs to be in place to deal with any potential sudden increases in horticultural production as volume based targets may be more demanding under this scenario.

*Milestones* are important to track the levels of attainment on a regular agreed basis, especially if final targets are set many years into the future.

*Available evidence* should be a prerequisite to underpin any policy. Now that work has been funded by Defra to elicit some of the required detail in terms of costs of reducing the use of peat, the availability of alternative materials, current usage figures etc., future targets can be based on agreed actual or calculated figures. Further work though is still required to validate and clarify the carbon dioxide / greenhouse gas emissions data.

To cover all potential industry and sector interactions and knock-on effects, *all sectors that use peat* should be included within the policy. This should also be extended to other industries too, for example the use of peat as a fuel should also be included.

Although all sectors should be included, *differentiating between the amateur and professional sectors* not only helps to target the sector where the most rapid gains are likely to be made in terms of moving away from peat, it also permits differences between the sectors to be taken into account and planned for when setting targets and timescales. However with this approach there needs to be serious discussions with the substrate manufacturers to establish the effects on their abilities to supply raw materials to a shrinking market and at what costs.

*Soil improvers should be considered separately from growing media products*. Massive steps forward have been made since the first peat use audits of the early 1990s to completely eliminate peat from soil improvers. There is absolutely no need to consider this area slipping back to the use of peat as, with the exception of the specific creation of ericaceous raised beds in botanical gardens, there would be no merit in the use of peat for soil improvers.

Other issues which should be considered as core criteria include the *costs of moving away from peat* (how are these shared within the industry and Government, how technical developments are funded etc.) and how the *UK sits with the rest of the EU in terms of its peat reduction policy*, so that UK industries are not penalised as a result of moving towards a peat free target.

**Question 4: Do you agree that the horticultural use of peat can and should be phased out in all markets and for all plant species and growing media products? Based on evidence where possible, should there be any exceptions to this?**

Peat could probably be physically phased out in many horticultural markets (with the possible exception of some specific crop uses such as the production of insectivorous plants and ericaceous plants) given a sufficient period of time in which to develop suitable mixes and to allow growers to amend cultural practices and change processes. However, the key issues are:

1. Can the process be undertaken without unduly financially impacting on the sectors in question?
2. Will the quality of the plants produced in alternative media be the same as those produced in a peat-based media (especially those destined for retail sale)?
3. Can the current timescales for transition actually be met?

The Defra-funded project SP0577 '*Costs to the horticultural sector of meeting the UKBAP target on peat use in horticulture*' calculated the many millions of pounds (over £100 million) already spent by the growing media industry, growers and research bodies in developing reduced peat mixes to the current level. However, one of the project's main conclusions was that the *ongoing* costs of moving to reduced peat production systems were very significant (over £80 million per annum to achieve a 90% peat reduction target by 2020). The report also went on to highlight that such costs would increase more rapidly as a greater proportion of peat within the growing media was replaced, and that a faster transition to reduced or peat-free media increased the costs.

Even allowing for a longer transition period for the professional sector (to 2030) the annual cost to the industry will still be extremely substantial. If it proves difficult to reclaim such extra costs through the supply chain / end user (as experienced so far) the obvious question is who covers the cost of this process?

Several projects have examined the production of plants grown in peat media against alternatives, e.g. WRAP funded project OAV023 '*WRAP support for trials of composted / digested products*'. The bedding plant trial within this project indicated that plants could be grown in some 'better quality' media based on composted green waste but that plant quality was negatively affected and that the production time of finished plant material (relative to plants grown in a peat media) was also extended by many days as a consequence. A loss of plant quality and an increase in production times would both impact on the profitability of grower businesses. This is counter to all the targets set by retailers and the expectations of their customers.

As indicated in the Defra funded project SP08019 '*Availability and supply of alternative materials for use in growing media to meet the UKBAP target on reduced peat use in horticulture*', one of the key issues will be ensuring that there are sufficient amounts of a range of materials (coir, bark, wood fibre, green waste etc.) available to the growing media industry to create the next generation of mixes.

Future mixes will need to be based not on a single raw material but on two or more different materials blended together. Although there appears to be a surplus of some materials (for example composted green waste - which can only be used to a certain volumetric level in mixes) it will take many more years to generate trusted sources or

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stocks of other materials, even without taking into account the impact of other industry needs on these materials. A 2020/2030 timescale does not take this into account sufficiently.

***Question 5: Do you agree (based on evidence where possible) that peat can and should be phased out of all public sector procurement activities, including Local Authorities, by 2015?***

Phasing peat use out of all public sector procurement activities would set an example for other sectors to follow as stated in the Defra consultation document. Phasing out peat use as a soil conditioner, mulch or tree planting media should be attainable based on the levels of alternative materials currently used.

Phasing peat use out of plant production (the plants being either bought-in or to a lesser extent nowadays actually grown on local authority nurseries) however may be less straightforward. Growers in the past have achieved a small price premium for peat-free bedding plants with some local authorities or have used the supply of peat-free plants to give them an advantage when tendering for large contracts with local authorities. It remains to be seen if this will continue (due to Government financial cutbacks) and if growers will continue to supply plants grown in peat-free media in the future if the margins achieved are limited further.

***Question 6: Do you think that there is more that Government and the public sector should be doing to support and enable the switch to peat-free growing media? If so, what would be the priorities?***

Within the consultation paper there has been little discussion about cost attribution and Government financial support for a move towards the use of peat-free growing media. It is implicit within the consultation document that the extra costs will be absorbed by businesses within the supply chain or by the end user. However, such costs have not been passed onto the end user and continued absorption by the supply chain is not a long term option.

Financial support for the process will be required to help fund the strategic development and management of new growing media, to cover knowledge transfer to the various industries / sectors and to support the required technical developments. So far the costs of this process have been borne to a large extent by individual companies and by the HDC (12 HDC funded projects are listed in Table 8 of the Defra funded project SP0577 '*Costs to the horticultural sector of meeting the UKBAP target on peat use in horticulture*'). HortLink and WRAP have funded specific projects on composted green waste, whilst Defra have funded the peat monitoring exercise since 1993, workshops on peat reduction and the three projects which underpin this consultation exercise (the costs and availability of alternatives and the greenhouse gases associated with growing media materials).

Individual companies and the HDC cannot be expected to continue to bear such costs into the future. These on-going costs are very significant and industry and HDC do not have the resources to cover these development costs on their own. Financial support from other sources will be required to continue the development work at the progress required. Examples could be tax breaks on research and development programmes undertaken by individual businesses or a capital grant scheme.

The peat use situation within the rest of the EU will also require further negotiation and action to ensure that the UK does not progress its move towards peat reduction in isolation. If this was to happen then this could potentially put the UK growing media

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industry and UK growers at a serious disadvantage relative to other businesses in the EU. Instead of addressing the issue it may simply lead to the 'export' overseas of the issue as peat based growing media will no doubt be imported into the UK along with plants grown in peat based media (as admitted within the impact assessment paragraph 12.2).

Further discussion with retailers is also required to educate the public about reduced peat or peat-free media and its environmental benefits. This could help to facilitate not only an increase in demand for such products but also the possibility of a price premium. An alternative suggestion could be the removal of VAT from peat-free amateur products which may also help to stimulate demand.

***Question 7: Do you agree (based on evidence where possible) that the use of peat in soil conditioners can and should be phased out by 2013?***

The use of peat as a soil conditioner is difficult to justify. As stated in the Defra consultation document there are other materials based on composted green compost which can be used to improve structure and organic matter content much more readily than peat. There are also other materials, such as bark, which perform just as well when used as mulch materials. In the small number of cases where peat is used to acidify the soil to create ericaceous beds, there may be a need to educate the public to use other materials (such as sulphur) to achieve this. As the level of peat used to condition soils is already quite low relative to alternative materials, then a target of 31 December 2013 should be sufficient to permit remaining peat-based products to move through the supply chain.

***Question 8: Do you agree (based on evidence where possible) that the use of peat in the amateur market can and should be phased out by 2020, and that the proposed interim milestones are sufficiently ambitious and achievable?***

As the amateur gardening sector is still the main user of peat based growing media then more emphasis should be placed on this sector to reduce its demand for peat and to move it towards other alternative materials. This sector (relative to the professional sector) has less stringent requirements from a growing media (although this is not to say the sector will not be demanding in its own right) which again could be advantageous in a move away from peat. However, the timescale set appears to be overly ambitious and will not work without the buy-in of all the retailers (DIY, supermarkets, garden centres and other outlets) rather than just the select few mentioned in the consultation document.

An agreed list of attainable objectives (which set out peat reduction in a series of logical steps) tied into a timescale should be agreed with both media manufacturers and retailers before a future date is simply 'selected' as the new target. Any plan created will have to take into account the impact of a range of factors which are not easy to determine, such as for example the impact on wood based alternative materials from the biomass industry and how quickly reliable sources of quality coir can be sourced in India and Sri Lanka and then exported. Investment in the transport infrastructure for the collection and transportation of coir within these countries will not be a rapid process.

Another factor to address (as touched upon in paragraph 5.11 of the Defra consultation document) is the rate of change. Achieving a 30% reduction in peat use was relatively straight forward, developing a 100% peat-free blend which is high quality and consistent over time will be much more demanding and costly for the growing media

manufacturers and may require a change in approach by the public in the way they use such media.

Further work is also required to determine the elasticity of demand for growing media by the final user. As stated in the response to question 6 there needs to be an increase in the price of reduced peat or peat-free media to accommodate the extra costs of product development, extra costs of the other materials etc.; these will need to be passed onto the public. If the price changes do cause a dramatic change in people's buying patterns for growing media, resulting in a downturn in the overall amount of media purchased by amateur gardeners, this could have a dramatic impact on the financial status of the growing media companies and will mean that the costs of achieving the target will be much higher relative to the annual turnover of the growing media manufacturing sector (as stated in paragraph 5.12 of the consultation document).

***Question 9: Do you think that more needs to be done to build consumer awareness, improve labelling at point of sale or improve and standardise the quality of growing media products? If so, what would be your top priorities?***

Ideally demand creation for peat-free growing media at the amateur gardening level should be a combination of all 3 factors mentioned in paragraph 5.18 of the Defra consultation document – i.e. demand should be retailer, product and customer driven to achieve maximum impact. All three aspects are inter-related so it would be difficult to address any one on an individual basis and still achieve maximum impact.

The Growing Media Initiative (GMI) has made some in-roads into facilitating change at the retailer level with peat alternative materials; the Royal Horticultural Society (RHS), the gardening press and environmental pressure groups have all put messages across to the public about the benefits of peat-free growing media and the quality of reduced peat and peat-free growing media has undoubtedly improved over the last few years. However, there still appears to be a lack of awareness and / or a hesitation about using peat-free media (possibly based on previous bad experience of using the media) by the general public.

General public education campaigns are expensive to undertake and are often slow to take effect, targeted campaigns at the retailer level where the purchasing decisions are made will probably be more appropriate and effective. The problem is a lack of a consistent clear message both on product bags and point of sale material. The plethora of symbols, badges and images that are now used on products makes the matter even more complicated for the public. The 'European Ecolabel' is a good example of a symbol which will not be recognised because of the lack of understanding about its meaning and purpose by the public.

Although a number of peat-free growing media products performed well in recent *Gardening Which?* trials there is still a need to improve the quality of peat-free products in general terms, so that the public has a wider choice of quality products for different gardening purposes.

***Question 10: Taking account of initial analysis, are there any subsectors that you think are likely to face higher or lower costs of transition? If so, what evidence do you have for this?***

Within the Defra funded projects SP0577 '*Costs to the horticultural sector of meeting the UKBAP target on peat use in horticulture*' the two horticultural sectors listed as having the most difficulty replacing peat in terms of costs implications were the

mushroom and pot plant (including potted bulbs) sectors, primarily due to stringent quality requirements for these products and strong overseas competition (as also stated in paragraph 6.6 of the consultation document). There are also major issues with other crops (for example plant propagation of vegetables, salad plants and ornamentals, pot grown herbs and bedding plant crops – see the following grower case studies which highlight the time and effort already spent developing reduced peat media and the barriers which still need to be addressed) where the plants can be sensitive to conductivity and chemical levels within the media, and where there is little time to address any loss in quality (either due to the media directly or inappropriate cultural practice) within the crop production timescales before marketing. Such crops may also be delayed as a result of the growing media used (see the response to question 4) or suffer from pests (for example sciarid fly – see attached case studies) which are actively encouraged by some growing media (as examined as part of HortLINK project HL0193 ‘*New approaches to microbial control of insect pests in protected crops and their interaction with waste-based growing media*’ (partly funded by HDC as Project PC 283)) and can cause issues with direct plant losses or product rejection at marketing.

As well as within horticulture, there will also be issues in the growing media industry where growing media businesses which were traditionally sited close to peat sources may find themselves at a serious disadvantage logistically when pursuing a move to alternative materials. Such businesses may be forced to physically move to a more appropriate location (close to ports, sources of green waste or wood fibre etc.) with all the costs involved.

Any horticultural crop sectors which already use minimal amounts of peat (such as hydroponically-grown tomato and cucumber crops and the professional landscaping sector for example) or those already moving towards using less peat (for example the protected soft and cane fruit sectors, where coir is replacing peat in production bags used for strawberry and raspberry production) may probably find their costs of transition in the future are potentially lower relative to some of the other sectors mentioned.

***Question 11: Do you agree that a time-related industry working group should be established to develop a ‘roadmap’ to a peat-free future in professional horticulture? If so, do you have comments on the proposed objectives?***

It would be useful to create an industry working group to highlight the issues and suggest potential methods of addressing them; this would at least create an overview of the situation. However, some of the issues facing the industry are already known but their solution would be outside the remit of the group, for example future funding sources for research and development, use of peat outside the UK, future sources of raw materials etc. (To a limited extent (in terms of the amateur sector) this role is already currently being undertaken by the Growing Media Initiative).

Placing these issues to one side, the group would need to be representative of all the key stakeholders involved and would need to work with some kind of financial budget to address the issues within its remit. Otherwise it would be in great danger of becoming nothing more than a discussion group.

***Question 12: Do you agree that the use of peat in the professional grower market can and should be phased out by 2030 at the very latest? Based on evidence where possible, do you think it is feasible to phase out peat from this market earlier than 2030?***

There is a need to continue working towards a peat-free target but it must be recognised that great strides have already been made by the professional grower sector (see following case studies). However, as per the comments for the amateur gardening sector (question 8), the timescale set for the phase out of peat in the professional sector appears to be very ambitious and will not work without the buy-in of the growing media manufacturers and a good majority of growers and retailers from all the sectors.

An agreed list of attainable objectives (which set out peat reduction in a series of logical steps) tied into a timescale should be agreed with both media manufacturers and growers before a future date is simply 'selected' as the new target. Any plan created will have to take into account the impact of a range of factors which are not easy to determine. These might include, for example, the impact on wood-based alternative materials from the biomass industry and how quickly reliable sources of quality coir can be sourced in India and Sri Lanka and then exported. Investment in the transport infrastructure for the collection and transportation of coir within these countries will not be a rapid process. The lack of material availability is admitted within paragraph 10.6 of the impact assessment.

Another factor to address (as touched upon in paragraph 5.11 of the consultation document) is the rate of change. Achieving a 30% reduction in peat use was relatively straight forward, developing a 100% peat-free blend which is high quality and consistent over time will be much more demanding and costly for the growing media manufacturers and growers alike.

The quality and consistency demanded by growers for growing media is much higher than that demanded by the amateur gardening sector. The consequences of poor growing media performance are also significantly greater in this sector and the loss of crops can run into the hundreds of thousands of pounds in potential litigation and loss of future contracts with customers.

Moving to peat-free media will also mean a complete production system re-design for some growers (see attached case studies) to handle, manage and grow in alternative materials. The cost of this for each individual business will be financially prohibitive.

As a 2030 date for phasing peat out of the professional grower sector will probably be unachievable, attempts to phase out peat before this date will be unrealistic. Even if the 2030 is achieved in terms of English growers this may simply have 'exported' the problem by the use of imported fresh produce (grown or propagated in peat growing media) to meet the UK food chain supply needs.

***Question 13: Do you support proposals for annual Defra-led monitoring of peat based growing media sales?***

The monitoring methodology as described in the consultation document would probably be cost-effective to do (both for Defra and the growing media manufacturers), but the data generated would only be primarily of use to track peat use and verify the milestone achievements. An impact of this would be a reduced amount of useful information

about growing media use and trends available to the horticultural industry. The collection of data would still need to be undertaken by a trusted third party organisation.

**Question 14: Do you agree that data on the volume of peat used in horticulture is most effectively collected from growing media manufacturers?**

Yes, due to the diversity of the horticultural industry the logical data collection point is at the point of manufacture.

**Question 15: What are your views on timing and proposal objectives for the 2015 policy review?**

A review of progress is a requirement of any plan of action; however the date of the review will be determined by the date agreed for the phase-out of peat in the amateur gardening and professional grower sectors. Further detail of the review and its potential implications beyond the information contained in paragraph 7.5 of the consultation document should be made available to stakeholders before further comment is made.

**IA Question 1: Do you have any comments, concerns or additional evidence in relation to any of the core assumptions that we have adopted for the options analysis in this impact assessment?**

As a result of the complex nature of the assessment which has to address numerous variables quite often with insufficient information, it is to be expected that a number of assumptions will have to be made. However, there are a number of assumptions which raise concern or where there appears to be a conflict of data:

- The assumption in the impact assessment that costs will rise in a linear fashion between the 90% and 100% phase-out targets.
- The transition costs for the professional grower sector were listed as £768m in paragraph 8.10 of the impact assessment but are listed as £694 million in Table 10 of Defra funded project SP0577 '*Costs to the horticultural sector of meeting the UKBAP target on peat use in horticulture*'.
- The estimation that a target phase-out date of 2015 would incur double the costs of a 2020 phase out date and a phase out date of 2018 would incur 50% higher costs.
- That the costs of transition are split equally on an annual basis.
- The use of a straight line projection to extend the evaluations of availability from 2025 to 2030.
- There are also assumptions under the net benefit gains which should be verified / clarified (especially carbon dioxide and greenhouse gas emissions) as discussed at the consultation meeting on the Wednesday 9 February at Wellesbourne.

Other issues include:

- The risk of competition for materials from the biomass industry should not be underplayed and could be an important issue in determining the future uptake of some key materials.

- The costs of transition for growing media sold into the professional grower sector may have been passed onto growers from the growing media manufacturers to some extent, but there is still the same problem (as within the cost transition in the amateur gardening market) that these extra costs are not being transferred to the retailer / final user.
- The assumption that the balance between domestic and imported peats remains at 2009 levels, there may be changes to this balance as the phase out dates approach.
- There is insufficient discussion of the sensitivities and risks as listed in 8.32 of the impact assessment within the consultation document, even though it states 'they are discussed in more detail in the accompanying consultation document'.

***IA Question 2: Do you have any comments, concerns or additional evidence in relation to the initial analysis of options presented in the impact assessment?***

There are two main issues of concern with the initial analysis and a number of comments which relate to other specific impact tests:

- The most obvious issue is that within option 1 it is very difficult to justify the huge costs to the industry (as summarised in Table 7) of moving to peat-free when the net present values are so small.
- The phase-out target date of 2030 and material availability; within paragraph 10.6 of the impact assessment it states '*preliminary analysis suggests that if phasing out of peat is prioritised in the amateur market the professional market would not be supplied with sufficient alternatives until after 2030*'.
- Under wider environmental issues (paragraph 12.2 of the impact assessment) there is an admission that appears to undermine the whole purpose of the proposal '*Whilst it is likely that it will always be possible to import peat from overseas (Ireland and Baltics) for the right price*'. If this is the case then what measures can be used to prevent the importation of overseas peat into the UK? As imported peat currently accounts for 68% of all the peat used in the UK it will be a significant issue to address.
- In paragraph 12.3 (competition assessment impact test) of the impact assessment it states '*on balance, the policy options are unlikely to have significant impacts on competition*' and yet how can this be the case when the proposals will artificially alter the market for peat in the UK relative to the rest of the EU?
- Following on from this it is made clear in paragraph 12.5 that there will be advantages to UK growers when retailers begin asking for product grown in peat-free media. This statement assumes that retailers will make this request and it does not take into account the fact that retailers will probably require such product at the same price as that grown in peat, a problem which the horticultural industry has put forward for many years.
- Under the small firms impact test there is an admission that smaller firms will go out of business because of a lack of capital to invest in new machinery and

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production techniques (paragraph 12.7). Within this point there will also be issues of access to the newer materials by smaller firms who may also find it much more difficult to source materials from overseas (coir) or material produced by competitors (wood fibre).

- Under greenhouse gas emissions there is an assumed benefit that *'the remaining 6Mt of (carbon dioxide) reductions would occur in the countries from which we import peat, assuming that these countries did find alternative markets for peat'*. This is arguably a very optimistic assumption as it would mean such countries giving up revenue from the export of peat.
- Under rural proofing (paragraph 12.10) there is a comment that the manufacture of peat-free alternatives will lead to an increase in employment in the local area. However, such jobs will probably be not created where they were lost (i.e. adjacent to areas of peat extraction) and won't probably be created in rural areas at all as growing media manufacturers will need to move towards sources of green waste (urban areas), points of material import into the UK or close to factories producing the raw materials in the case of wood fibre.
- Finally under the administration burden reduction section, it is clear that the main savings from streamlining the information collection process will be made by Defra and the savings calculated for smaller growing media businesses may be academic if they are no longer in business.

#### ***Other comments and issues:***

The consultation document does not make it clear that there are actually 2 options being reviewed:

1. A voluntary reduction for all sectors.
2. A voluntary reduction for all sectors *excluding* professional growers.

The target set for the phase-out of peat use in Government and the public sector (2015) is not mentioned in the impact assessment. The proposal should be made clear in both documents to ensure consistency to the reader.

## Defra consultation on reducing the horticultural use of peat in England

### Horticultural case studies from key sectors

<b>Business name</b> <i>Westhorpe Flowers and Plants Ltd, West End Road, Benington, Boston Lincolnshire, PE22 0EL.</i>
<b>Business output</b> One of the country's largest plant propagators producing around 100 million vegetable transplants in modules for growing on by the vegetable industry. The turnover of the business is approximately £750,000 per annum.
<b>Growing media used</b> Peat based modular growing media (organic and conventional) is used to grow the young vegetable plants in. Around 2,500 m <sup>3</sup> of growing media are used per annum.
<b>Peat alternatives examined and used</b> The main alternatives examined include coir, composted green waste and miscanthus.
<b>In-house trials undertaken</b> Trials have examined the potential of a number of reduced peat growing media recipes: <ul style="list-style-type: none"><li>• Coir</li><li>• Coir + clay (coir 95% clay 5%)</li><li>• Peat + 20% composted green waste</li><li>• Peat + miscanthus</li></ul>
<b>Issues encountered and were they addressed</b> In the case of coir based growing media, issues occurred with fertiliser leach from the media, the addition of clay to the substrate helped to prevent this. However, coir based media generally had a negative impact on the development and shelf life of the transplants. Media based on composted green waste was very variable and reduced seed germination. As a result of potential contamination from sharps and disease, product liability insurance could not be obtained when using this media. Media based on miscanthus performed reasonably well, but it wasn't suited (in terms of particle size) to filling the small plugs in the module tray.
<b>Approximate cost of trials</b> Approximately £10,000 has been spent so far trialling peat alternative materials.
<b>Cost implications of using peat alternatives</b> The other substrates examined are up to 60% more expensive than those based on peat, adding an extra cost of around £120,000 per annum.
<b>Barriers and opportunities for your business using peat alternatives</b> There are issues of plant quality and shelf life with plants raised in a coir-based growing medium. Product liability insurance for plants grown in media based on composted green waste could not be obtained. The potential risk of human disease from composted green waste is an issue with supermarket customers. Currently there is limited opportunity to move from peat based growing media until suitable alternative media beyond those examined are available.

<p><b>Business name</b></p> <p><b>VHB Herbs, West End Nursery, Roundstone Lane, Angmering, West Sussex BN16 4AX.</b></p>
<p><b>Business output</b></p> <p>VHB Herbs are a leading UK grower of fresh herbs and seedlings producing around 16 million pot grown herb plants in a range of pot sizes from 8-13cm. Around 12 million punnets of seedling cress are also produced by the company. The company has an approximate turnover of almost £15 million.</p>
<p><b>Growing media used</b></p> <p>Peat based growing media is used in the production of both pot grown herbs and seedling cress. Around 12,000 m<sup>3</sup> of media are used in the production of both crops. Currently up to 30% peat replacement (using wood fibre and perlite) has been attained with the pot grown herb crops. Cress production still occurs mainly in a peat based substrate.</p>
<p><b>Peat alternatives examined and used</b></p> <p>As well as using wood fibre and perlite in commercial growing media mixes, commercial trials have been undertaken to examine the possible use of composted green waste at an inclusion rate of 20-30%. Cellulose matting (from sustainable forest production) has been examined for cress production.</p>
<p><b>In-house trials undertaken</b></p> <p>In the case of pot herbs, coir and wood fibre based substrates have been trialled along with vermiculite, clay and composted bark in an attempt to create a peat free media option. Cellulose matting continues to be the main potential option for cress production.</p>
<p><b>Issues encountered and were they addressed</b></p> <p>In terms of pot herb production, the main problems encountered using peat alternative mixtures were product quality issues with symptoms such as leaf scorch, reduced growth and poor leaf colour impacting on the visual appeal of the product. There was a reduction in the shelf life of produce raised using peat alternatives which was unacceptable to customers. There was also a cost implication, the other substrate materials costing up to 60% more and adding an extra cost to the business of around £180,000 per annum.</p> <p>In terms of seedling cress production, the main issues have been product / material desiccation, issues with mould growth on the cellulose and poor leaf colour. Once again the material costs were greater, adding an extra cost of around £25,000 per annum. Post marketing, waste levels rose to new highs in store which was accompanied by an increase in the number of customer complaints.</p>
<p><b>Approximate cost of trials</b></p> <p>Over £50,000 has currently been spent on internal trials assessing peat alternative materials.</p>
<p><b>Cost implications of using peat alternatives</b></p> <p>In terms of raw material costs alone, the cost implication of moving to peat alternative materials would be an extra £200,000 per annum.</p>

### ***Barriers and opportunities for your business using peat alternatives***

The main barriers to adopting peat alternative materials include:

- Microbial standards\*
- Potential pesticide contamination\*
- Potential foreign body contamination\*
- Cost
- Quality issues manifesting as physical and nutritional disorders in the plant products

\*These issues are especially true in the case of media based on composted green waste.

Future opportunities are limited whilst the production issues mentioned and extra costs remain.

**Business name**

**Bordon Hill Nurseries Limited, Bordon Hill, Stratford-upon-Avon, Warwickshire CV37 9RY.**

**Business output**

Bordon Hill Nurseries Limited is one of the country's largest ornamental plug plant producers, predominantly producing young plants for Ball Colegrave Limited. Both companies belong to the Ball Group, an international company. Product lines include bedding plants, perennial plants and vegetable plants, both seed and cutting raised. The company also produces pack and pot bedding plants and seasonal pot plant crops including cyclamen, poinsettia, geranium, fuchsia etc.

The company produces approximately 260 million individual plug plants, over 300,000 poinsettia plants, over 150,000 cyclamen, 350,000 bedding plants in 10 cm pots, 50,000 hanging baskets and 550,000 packs of bedding plants. The company's approximate annual turnover is £7 million.

**Growing media used**

Across all crops around 4,500m<sup>3</sup> of growing media are used, over half of this is used to produce the plug plant crops.

**Alternatives examined and used**

Coir, wood fibre, composted bark, composted green waste and perlite have all been used to various levels in the media mixes. Some novel waste products such as wool and brick dust have also been examined, with little success.

**In-house trials undertaken**

Various peat dilution / substitution trials using a range of alternatives have been undertaken over many years. Commercially peat reduction is currently achieved using:

2% perlite on the plug plant growing medium, 30% wood fibre in the pot and pack bedding growing media, 25% wood fibre, 10% perlite and 5% clay in the poinsettia growing medium and 20% composted bark in the cyclamen growing medium.

**Issues encountered and were they addressed**

Nutritional deficiencies / toxicities have occurred as a result of using reduced peat mixes, some of which were overcome in the case of longer term pot grown crops but not in the case of young plant production. Young plug plants being highly sensitive to inappropriate nutrition and having short production times can be quickly and irreparably damaged leading to significant losses.

Chemical and physical stability and predictability of the media are key issues especially for propagation. The media has to be fine enough to allow tray fill and seed sowing yet retain its structure during production. A plug plant is produced in a very small volume so the media has to be stable and consistent; otherwise production variability would become unacceptable. Owing to these variables a switch from a peat based substrate for propagation would incur significant loss in germination performance.

Increasing pest levels have also been observed when using reduced peat mixes. Mixes in excess of 35% peat reduction favour pests such as sciarid fly which can cause significant crop losses.

**Approximate cost of trials**

£25,000 over the last 5 years.

***Cost implications of using peat alternatives***

The estimated increase in raw material costs for finished product would be approximately £20,000 per year. Every 1% loss in seed germination performance would cost the business £75,000 per year.

***Barriers and opportunities for your business using peat alternatives***

Barriers include higher direct material costs, availability of suitable alternatives, loss of plant performance, increased wastage and higher pesticide and fertiliser use. The company sees little opportunity to expand its current use of peat alternatives. Peat based media remains essential for propagation.

**Business name**

**Roundstone Nurseries Ltd, Newlands Nursery, Pagham Road, Lagness, Chichester, West Sussex PO20 1LL.**

**Business output**

Roundstone Nurseries Limited is one of the largest producers of bedding plants in the UK; the company also produces pot plants and young ornamental plants in plug trays. The company supplies a large DIY retailer with plants along with a range of other garden centres and growers (the latter with young plants) and has a turnover of approximately £20 million.

**Growing media used**

Roundstone Nurseries has made great strides to reduce its peat use to meet the demand of its main customer and to conform to the requirements of the British Ornamental Plant Producers (BOPP) Certification Scheme. Currently the growing media used is based on 70% peat and 30% wood fibre.

**Alternatives examined and used**

The main alternatives examined have been:

- Wood fibre
- Composted bark
- Composted green waste

**In-house trials undertaken**

Extensive trials have been undertaken over several years examining the above mentioned alternatives. The nursery was also a host for the WRAP funded trial OAV023 'WRAP support for trials of composted / digested products' which examined the potential use of media based on composted green waste in the production of bedding plants.

**Issues encountered and were they addressed**

Although success has been achieved implementing the use of wood fibre at up to 30%, all composted green waste materials appear to have problems with lack of uniformity, high salt levels, nutrient lock-up, high bulk density, reduced air filled porosity and potential glass and plastic contamination. These factors impact on product quality, production times and delivery costs. The latter issue can lead to product rejection by the final customer.

**Approximate cost of trials**

The cost of the trials undertaken so far over several years (including labour and materials) has been approximately £50,000. These include specific trials undertaken directly for customers.

**Cost implications of using peat alternatives**

Wood fibre is 40% more expensive than peat.

**Barriers and opportunities for your business using peat alternatives**

Although adding wood fibre to the mix in moderate amounts can improve the performance of the media, adding progressively larger amounts will entail cultural modifications and further technical work. Currently customers do not see any added value in peat reduction and therefore are unwilling to pay any price differential required to offset the extra costs of the media.

<p><b>Business name</b></p> <p><b>Double H Nurseries Ltd, Gore Rd, New Milton, Hampshire BH25 5NG.</b></p>
<p><b>Business output</b></p> <p>Double H Nurseries produce and deliver around 4.5 million houseplants to UK supermarkets each year. The company has heavily invested in the last decade in the most modern house plant production facilities in the UK and is proud of its 'green credentials'. Double H Nurseries have an approximate turnover of £18 million.</p>
<p><b>Growing media used</b></p> <p>Approximately 4,000 m<sup>3</sup> of peat are used annually which is supplemented with 10% perlite. The orchid crops grown are peat free, produced using a bark based growing media.</p>
<p><b>Alternatives examined and used</b></p> <p>Fytozell (a bio-degradable organic flake) has been trialled on a small scale. Over the years various reduced peat substrates (generally wood based) have been trialled (up to 40% reduction) with varied success. Reduced peat substrates based on composted green waste have also been examined.</p>
<p><b>In-house trials undertaken</b></p> <p>Various trials have been held over the last 6-7 years, currently a 30% reduced peat media (based on 10% perlite and 20% wood material) is underway. A 40% reduced peat media will be trialled later this year along with a recycled wood blend media.</p>
<p><b>Issues encountered and were they addressed</b></p> <p>In 2005 a 50% reduced peat media was trialled which caused leaf scorch to a crop of pot chrysanthemums.</p> <p>Trials with the Fytozell were not successful.</p> <p>Issues developed with sciarid fly on the crop as a result of using media based on composted green waste.</p> <p>The 30% reduced media has so far performed well.</p>
<p><b>Approximate cost of trials</b></p> <p>£10,000 over the last 6-7 years in extra costs, management and monitoring.</p>
<p><b>Cost implications of using peat alternatives</b></p> <p>Depending upon the media selected, the cost implication of moving towards reduced peat (30-40%) would be between £4,000 and £76,000 per annum, the latter figure being the cost of a coir based growing medium.</p>
<p><b>Barriers and opportunities for your business using peat alternatives</b></p> <p>The main issue is finding an alternative material that will produce the same quality of plant as that which can be produced in a peat based growing media. Trials have indicated that reduced peat mixes may be suitable, but the issue is moving beyond 30-40% peat reduction.</p>

**Business name**

**Hillier Nurseries Limited, Ampfield House, Ampfield, Romsey, Hampshire SO51 9PA.**

**Business output**

Hillier Nurseries Limited is the largest grower of trees, both field and container grown, in the UK and one of the largest in Europe. The company consists of three divisions; wholesale, amenity and garden centres. The wholesale division grows a range of container and field grown hardy nursery stock and herbaceous perennial species supplied primarily to the garden centre market. In terms of container grown plants, approximately 1.8 million plants are produced per annum generating a turnover of £6 million.

**Growing media used**

Only 19% of the growing media used by the company for potting is based solely on peat, the remainder is a blend of 15% composted bark and 85% peat. The total volume of growing media used is just over 4,500 m<sup>3</sup>. This is used for potting on plug raised cuttings / seedlings, liners (plants in 9 cm pots) and plants in 2 to 3 litre pot sizes into 1.5 to 20 litre pots.

**Alternatives examined and used**

The company policy has been to seek and explore viable alternatives to peat. Numerous alternatives were examined in broad screening trials, but more recently wood fibre, composted bark and coir have been the main alternatives examined in more detailed trials.

**In-house trials undertaken**

Trials have been undertaken in 1995 (screening), 2004, 2006, 2008 and 2010. Substrates examined have varied from 25% peat replacement products up to peat free mixes. Proprietary media based on composted bark, Sylvafibre, wood fibre and composted green waste have been trialled.

**Issues encountered and were they addressed**

The main issues in the early trials were huge levels of variability in plant growth in response to the media and product consistency. As the substrates performed differently to peat, cultural changes in production (specifically irrigation practice) had to be adopted. Although not as extreme now, variability in plant growth between species still remains a problem with some of the media examined. Another issue is passing on the extra costs of production to customers, which so far has not been achievable.

**Approximate cost of trials**

The cost of 5 years of trials examining peat alternative materials has been over £130,000.

**Cost implications of using peat alternatives**

A 7-11% increase in the cost of growing media results in an extra 5-10p on the cost of the final plant. This figure does not include extra water or other plant husbandry requirements.

**Barriers and opportunities for your business using peat alternatives**

The cost of peat alternatives is the main barrier. There is little demand from the final customer and they are not willing to pay extra for peat reduction, this will make a considerable number of lines (and possibly the entire business) unprofitable.

Although suppliers do not consider it to be an issue the company has concerns regarding the sustainability of peat alternative products in terms of both consistency and availability, particularly if large numbers of growers quickly change over from peat based growing media. Opportunities will come from better production of a few plant species and improved business 'green credentials', although this does not appear to be high on many customer agendas.

**Business name**

**Hall Hunter Partnership, Heathlands Farm, Honey Hill, Wokingham, Berkshire RG40 3BG.**

**Business output**

Hall Hunter Partnership is a leading UK grower of strawberries, raspberries, blackberries and blueberries for a number of large UK supermarkets. Over 2,000 people are employed spread across seven production sites; four traditional farms and three glasshouse sites. 8,000 tons of soft, cane and bush fruit are produced annually. The approximate (fruit based) business turnover is £31 million.

**Growing media used**

Approximately 5,000 m<sup>3</sup> of growing media are used per year. In the case of blueberry production various peat mixes are used (5-10 year production cycle). However, in the case of plant propagation a 50:50 peat:coir mix is used (annual cycle), whilst strawberry and raspberry production substrates are now 100% coir (2-3 year production cycle).

**Alternatives examined and used**

The main alternative examined and used on a commercial basis is coir. This has replaced peat as the production substrate for several crop types.

**In-house trials undertaken**

Various trials of peat and peat mixes against coir have been undertaken, as well as multiple trials on substrate life. In most short life (2-3 years) applications, coir performed well and is now used for up to 3 years.

Propagation requires a heavier medium for quick root growth so 50% mixes are best.

Blueberry crops are grown in pots so require specific types of medium. Many alternatives have been trialled but the plants require a base level of peat.

**Issues encountered and were they addressed**

The main issues are media pH, nutrient availability and a reduction in air filled porosity. The uptake of specialised irrigation dosing and application systems has enabled the widespread adoption of coir in production crops.

**Approximate cost of trials**

Most of the trialling was done on a commercial scale so installation and setup costs were significant. It would be difficult to give a single figure, however it would certainly be in the hundreds of thousands of pounds range.

**Cost implications of using peat alternatives**

The main cost is the higher specification irrigation dosing equipment required.

**Barriers and opportunities for your business using peat alternatives**

Coir products are now becoming available in bulk quantities. This will lead to reduced costs but quality issues will be more relevant. The move to large scale coir use exposes the UK to any global coir shortages (for example increased demand from China).

## Defra consultation on reducing the horticultural use of peat in England – estimated summary of peat and peat alternative use

Sector and crop	Specific uses	Alternatives used	% addition	Opportunities or barriers	Origins of peat used	Origins of alternatives
<b>Fruit</b>						
<i>Soft fruit</i>	Bags and loose filled table top systems- replacing traditional soil grown	Bark - pine	20-50%	Quality and consistency of supply and price, particularly wood chip.	Irish, Baltic	Spain, France for pine
		Bark - mixed conifer	10-40%			UK generally
		Coir	50-100%			India and Sri Lanka
		Wood fibre	20-40%			UK particularly N Ireland
<i>Top fruit</i>	Propagation	Bark - pine	20%	Quality and consistency of supply and price, particularly wood chip and risk factors in terms of composted green waste.	Irish, Baltic	Spain and France for pine
	Potting up of for example field grown crops	Barks	20-40%			UK generally
		Wood fibre	20-40%			UK particularly N Ireland
		Composted green waste	10-20%			UK generally
<b>Vegetables</b>						
<i>Field vegetables</i>	Propagation	None at present		Various additives examined in 2007- some good results. Industry not convinced of need for alternatives. Worry about costs on low margin products. Risk factors in terms and plant and human health.	Irish, Baltic	
<i>Leafy salads</i>	Propagation mixes for field grown crops	None at present		Industry not convinced of need for alternatives. Worry about costs on low margin products.	Somerset, Germany blocking peats	
	Some container grown leaf salads (living salads)	Bark fines	20-40%	Low margins prevent increasing input levels.	Irish, Baltic	Spain and France for pine
		Coir	20-40%			India and Sri Lanka
<b>Protected Edibles</b>						
<i>Tomatoes</i>	Grown almost exclusively in rockwool semi-hydroponic systems. Exceptions are some bag grown 'organic' crops - and some soil grown	None				
<i>Cucumbers</i>	Almost exclusively in rockwool semi-hydroponic systems	None				
<i>Peppers</i>	Almost exclusively in rockwool semi-hydroponic systems	None				

Sector and crop	Specific uses	Alternatives used	% addition	Opportunities or barriers	Origins of peat used	Origins of alternatives
<i>Cuts salads and herbs</i>	Raised in peat or reduced peat mixes	Coir	20-100%	Low supermarket returns are a barrier to change. Microbial contamination is an issue with all materials. Sciariid/shore fly problems. Delays in growth in peat free lead to crop scheduling issues.	Irish and Baltic	India and Sri Lanka
		Bark	20-50%			Spain and France
<i>Mushrooms</i>	Casing	None		Problems of 'scoring' of the caps has prevented uptake of work. Issues with cost of alternatives.	Irish, N of England and Baltic	
<b>Ornamentals</b>						
<i>Seed and cutting mixes</i>	Propagation	Coir	10-30%	Massive steps forward in this sector in the use of additives. Low margins a major hurdle.	Irish, Baltic and English	India and Sri Lanka
		Bark	10-50%			Spain and France
		Perlite	5-10%			
<i>Bedding plants</i>	Potting on of plants	Coir	10-30%	Some good results have been obtained. Margins from retailers do not encourage use. Some issues with composted green waste.	Irish, Baltic and English	India and Sri Lanka
		Bark	10-30%			Spain and France
		Wood fibre	10-60%			UK and German
		Composted green waste	5-15%			UK and German
<i>Pot plants</i>	Potting on of plants	Coir	10-30%	Good results with some crops but issues with others. Retailers not prepared for cost increases to achieve results.	Irish, Baltic and English	India and Sri Lanka
		Bark	10-30%			Spain and France
		Wood fibre	10-60%			UK and German
		Composted green waste	5-15%			UK and German
<i>Hardy nursery stock</i>	Propagation, liner production and potting on of plants.	Coir	10-100%	Once potted up from 'liners' then the use of additives becomes easier and desirable in effects. Cost and consistency of supply are issues.	Irish, Baltic and English	India and Sri Lanka
		Bark - pine and conifer	10-40%			Spain and France
		Wood fibre	10-50%			UK and German
		Composted green waste	5-15%			UK and German
<i>Bulbs and outdoor flowers</i>	Propagation	Coir	10-20%	Currently very 'cheap' mixes used, costs therefore an issue.	English, Irish and Baltic	India and Sri Lanka
	Mature plants in soil, hydroponics or deep trays for cut flowers	Sand and perlite	Up to 50%			UK and Greece

## **Horticulture Development Company further technical recommendations**

- It is recommended that the report SP08019 'Availability and supply of alternative materials to meet the UKBAP target on peat use in horticulture' is updated with current information on the availability of alternatives as the situation in terms of barriers and amounts available has changed recently.
- Further case study work is undertaken to ascertain the exact impact of the consultation on the UK horticultural industry.
- Further work is commissioned to verify / clarify the data underpinning the financial benefits of a move away from peat extraction.