

PHYTO-THREATS

Consumer Survey Summary Report

Attitudes and Behaviours of the UK's Plant-buying Public



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Forest Research is the Research Agency of the Forestry Commission and is the leading UK organisation engaged in forestry and tree related research. The Agency aims to support and enhance forestry and its role in sustainable development by providing innovative, high quality scientific research, technical support and consultancy services.

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Executive summary

- There is a greater tendency for older generations to buy plants. In fact, 75% of those qualifying for the study (i.e. purchased outdoor plants within the last 5 years) were at least 45 years old, and 57% were at least 55 years old.
- Garden centres are the most commonly relied upon source for plants, followed by DIY stores, supermarkets, from seed, and nurseries. The most important factors influencing the choice of source are quality of stock, cost, and range of plants. Factors relating to biosecurity and plant pests and diseases (such as site cleanliness, presence of biosecurity measures, and plant provenance i.e. origin of individual plant) are relatively unimportant when choosing where to buy plants.
- Individual plant buying choices are driven by their appearance, suitability to one's planting site, and cost. Plant provenance emerged as the least important factor.
- Of the various sources of advice and guidance available when buying plants, 'friends, family and neighbours' is the most important, followed by the internet and thirdly, the plant seller's advice.
- Plant buyers' awareness of pests and diseases is low, both in terms of the general threat to British trees and woodlands from pests and diseases, and of the individual pathogens posing a threat.
- Perceptions of risk from sellers in relation to plant pests and diseases differ substantially, with non-specialist retailers without public access being regarded as the riskiest sources (international and domestic online retailers, and mail order sources). In contrast, self-grown plants and those from specialist suppliers and nurseries were seen to carry the lowest levels of pest and disease risk.
- There are established markets for many accredited/certified products, with over half of the sample reporting to buy such products at least some of the time. This decision is influenced by their favourable outlook on the ideals of such schemes, but also perceptions of a higher quality product. Added expense emerged as the key reason why respondents sometimes choose not to buy accredited products.
- Respondents reacted favourably to a hypothetical accreditation scheme for the plant trade on the basis that it would help to safeguard the wider landscape and ensure high quality products. However, a substantial proportion (25%) noted that despite agreeing with such a scheme in principle, they are concerned about higher prices resulting for consumers.
- In general, the more someone spends on plants per annum, the further they would likely travel to obtain plants from an accredited source. This signifies an opportunity for early adopters of a would-be scheme to attract new and valuable customers.

Introduction

PHYTO-THREATS is a collaborative research project involving seven participating institutions from across Britain (Forest Research, James Hutton Institute, Centre for Ecology and Hydrology, University of Edinburgh, University of Worcester, Animal and Plant Health Agency, Science and Advice for Scottish Agriculture). The project is funded by the Living With Environmental Change partnership through the Tree Health and Plant Biosecurity Initiative.

A consumer survey was developed in response to PHYTO-THREATS' objective to assess the feasibility of an accreditation scheme for nurseries (underpinned by best practice) to mitigate the further spread of Phytophthora. Consultation with the sector revealed that the uptake and success of an accreditation scheme would likely depend on the willingness of consumers to acknowledge and support such a scheme, particularly through their purchasing behaviour.

While it is recognised that there are a variety of different types of consumer relevant to the tree and plant trade, this report deals solely with findings from a survey of the plant-buying general public. Specifically, results relate to a nationwide survey of 1500 plant-buyers (over the age of 18) conducted in spring 2017. The survey sought to investigate consumers' knowledge of pest and disease threats, their current purchasing behaviour, drivers for this behaviour, and willingness to support an accreditation scheme within the sector.



Sample characteristics

Table 1 summarises the respondents' demographics as well as the corresponding figures from the most recent national census (2011).

Table 1. Demographics of Respondents and Wider Population

Gender	Census (%)	Respondents (%)
Male	49	49
Female	51	51
Age band	Census (%)	Respondents (%)
18-24	12	4
25-34	17	10
35-44	18	12
45-54	18	18
55-64	15	23
65+	21	34
Region	Census (%)	Respondents (%)
North East England	4	5
North West England	11	10
Yorkshire	8	12
West Midlands	9	8
East Midlands	7	9
East of England	9	9
South West England	8	8
South East England	14	15
London	13	11
Wales	5	5
Scotland	8	7
Northern Ireland	3	2

All figures rounded to the nearest whole number.

It is notable that although our sample closely matched the wider UK population in respect of respondents' region and gender, there is some disparity in respect of age bands. The sample has a significantly greater degree of representation from the more senior age bands than would be expected from a random sampling procedure (i.e. without filter questions pertaining to the recent purchasing of plants). This simply demonstrates that it is those within the older age bands who are more likely to purchase plants.

Key findings

Buying habits

Respondents were asked a range of questions about which sources they use to acquire plants (Fig 1), which are the main sources in terms of quantity of plants bought, and how frequently they use the various sources to purchase plants.

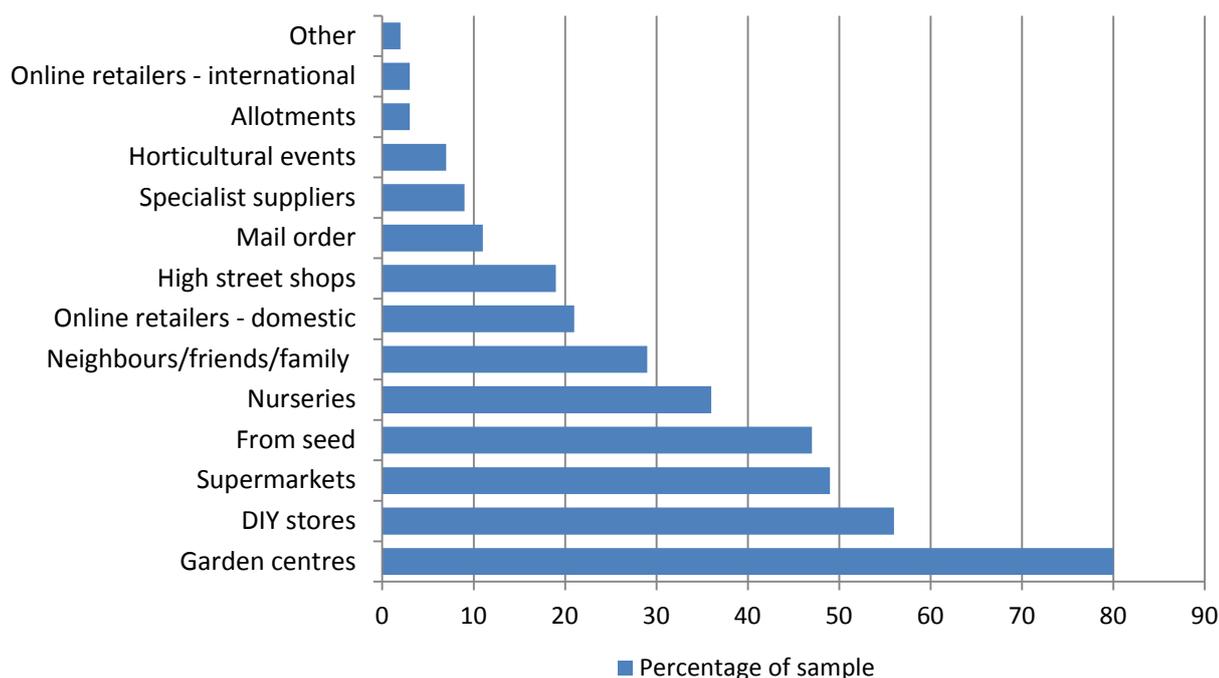


Figure 1. Sources of Plant Acquisition

Many of those in the sample rely on multiple sources for obtaining their plants, however, garden centres are the source used by most of the respondents (80%). DIY stores and supermarkets are also relied upon by a substantial percentage of the plant-buying public.

When ranking which sources provide respondents with the largest quantity of plants, garden centres and DIY stores are again the most important, followed by ‘from seed’ and supermarkets.

With regard to frequency of acquisition, the majority of buyers typically use the sources once or twice a year. For example, 52% of respondents visit garden centres once or twice a year, 35% do so 3-5 times per year, and 7% visit more frequently. In the case of less accessible sources, such as horticultural events, purchasing frequency is lower – 0% reported purchasing from this source more than 5 times per year.

Drivers of consumer behaviour

In an attempt to understand what drives the aforementioned buying habits, respondents were asked to rate the importance of various factors in their decision to obtain plants from a particular source, and subsequently, when deciding which particular plants to obtain.

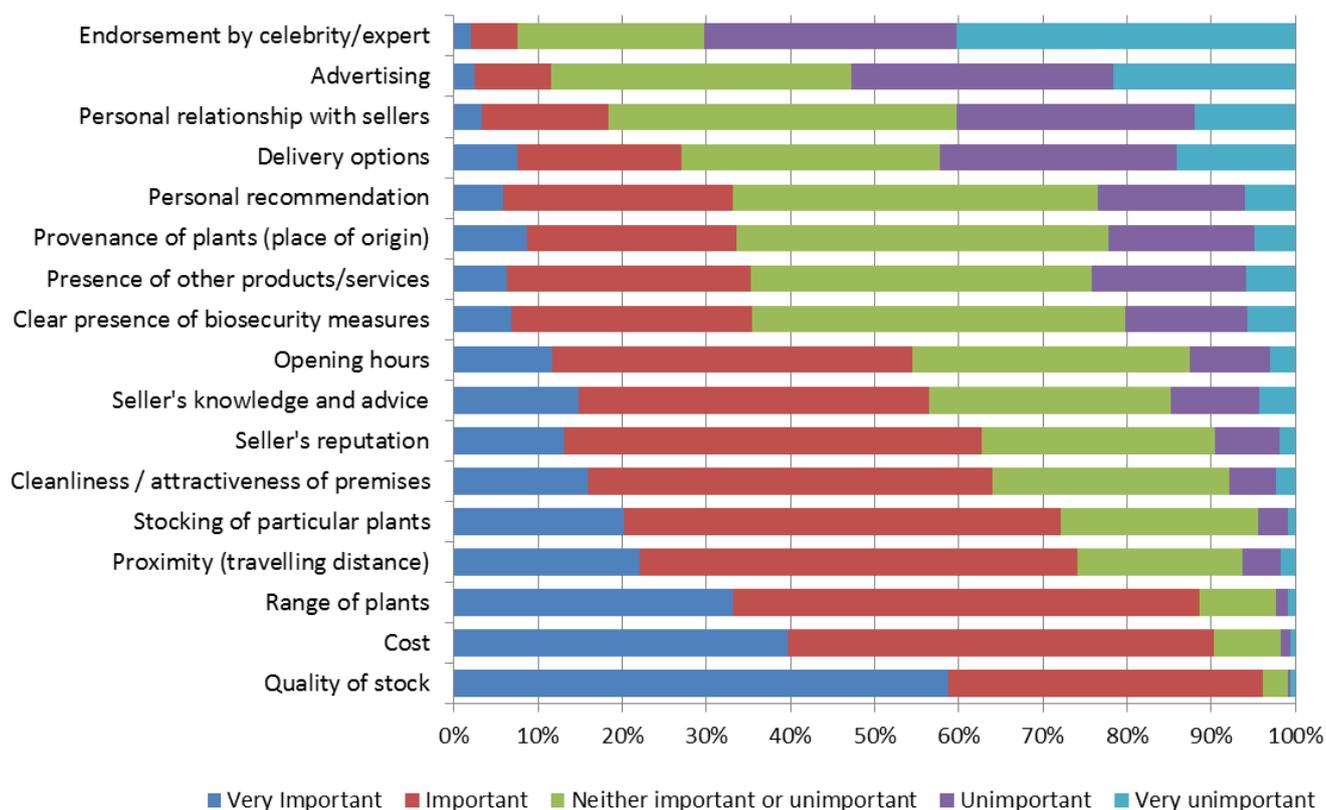


Figure 2. Drivers of Source Selection

'Quality of stock' is the most important factor in consumers' decision about where to obtain plants, with over 95% rating this as being either 'important' or 'very important'. 'Cost' and 'Range of plants' were also shown to be influential drivers.

While quality of stock may be used as an indication of plant health via visual inspection, other factors tied to plant health such as a site's cleanliness, its biosecurity measures, and the product's provenance (place of origin) all appear to be less important when deciding where to obtain plants. Similarly, when asked which factors influence which particular plants consumers decide to obtain (from any given source), 'appearance of the plants' emerged as the most important of seven factors (with 97% considering this 'important' or 'very important'). In contrast, 'provenance' (origin of individual plants) was the least important factor (with only 32% considering this 'important' or 'very important').

The selection of a particular type of plant may also be influenced by the advice and guidance emanating from a spectrum of different individuals, groups and mediums. Figure 3 outlines the percentage of the public who rely on these different sources when seeking advice on what to buy.

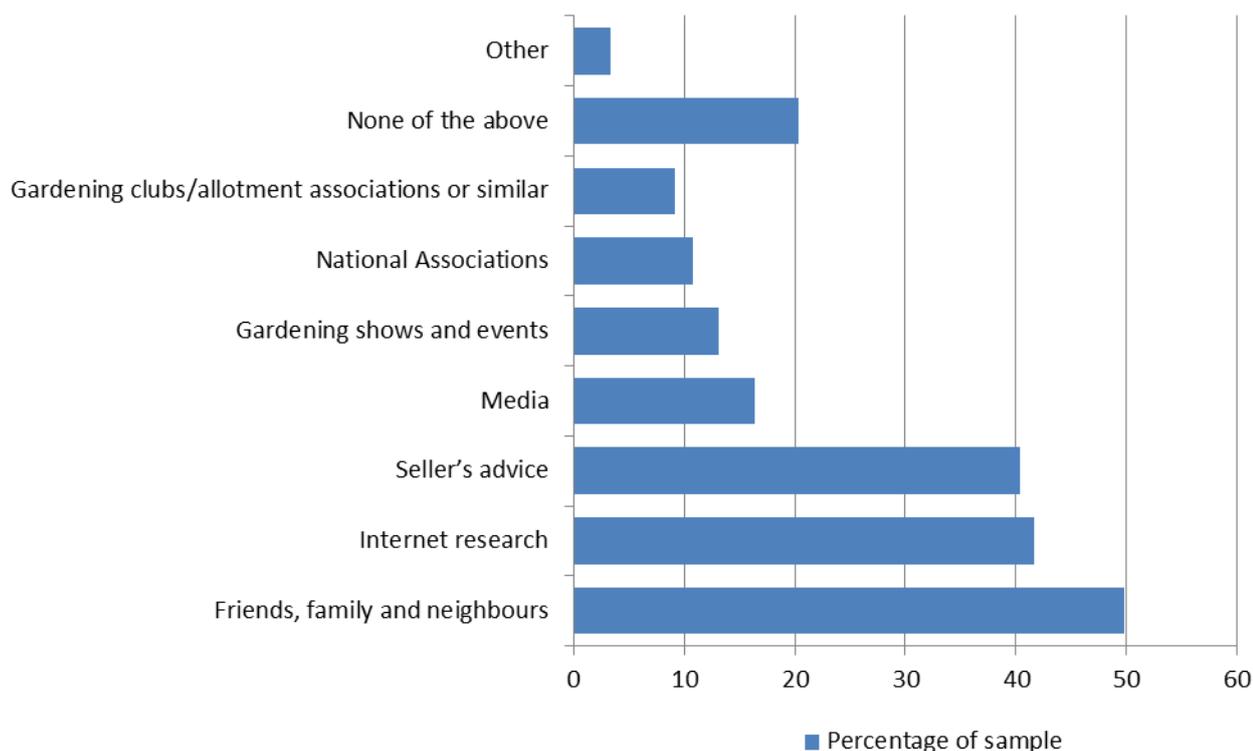


Figure 3. Sources of Advice and Guidance when Buying Plants

Friends, family and neighbours are the most commonly relied upon source for advice and guidance when buying plants (used by 50% of the sample). The other commonly relied upon sources include the internet and the advice of those selling the plants (used by 42% and 40% of the sample respectively).

Media, Gardening shows and events, National Associations (Royal Horticultural Society (RHS), Garden Organic, National Allotment Association, Federation of City Farms and Community Gardens) and local clubs/associations are comparatively unimportant sources of advice and guidance, with each used by fewer than 17% of respondents.

Knowledge and attitudes towards pests and diseases

Respondents were asked to report their level of knowledge on tree/plant pests and disease as a whole, and subsequently on a selection of specific pests and diseases that pose a threat within the UK. In addition, respondents gave their perception of the level of pest and disease related risk associated with obtaining plants from various sources.

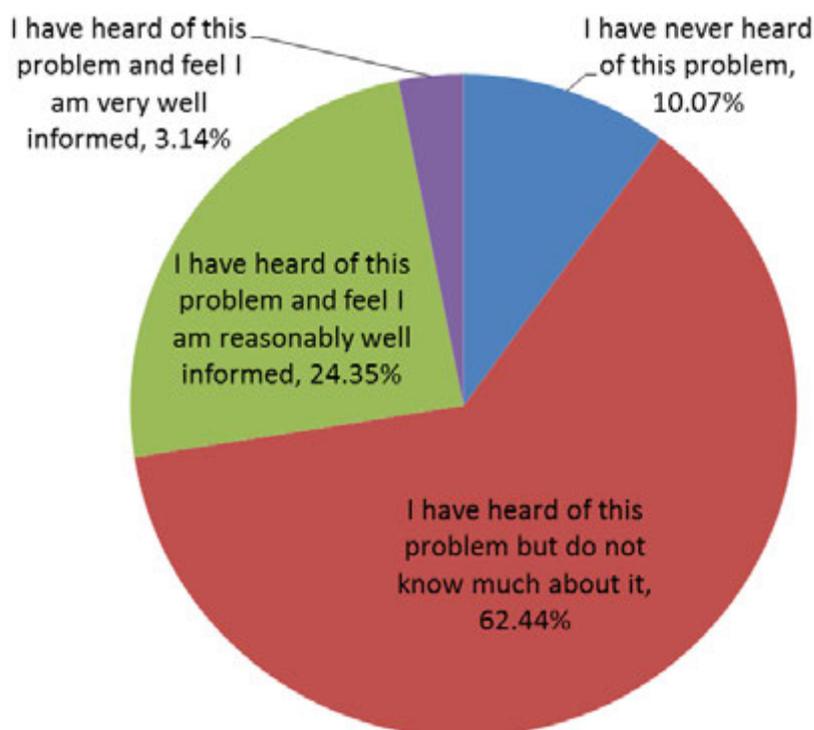


Figure 4. Knowledge of Threats to British Trees from Pests and Diseases

Most of the sample (62%) have heard something about threats to British trees from pests and diseases but know little about it. A further 10% have never heard of the problem. Approximately one quarter (24%) have heard about the problem and consider themselves to be reasonably well informed, while only 3% reported to be very well informed.

Asked about several specific threats (Red band needle blight, Oak processionary moth, Dutch elm disease, Asian longhorn beetle, Ash dieback, Sweet chestnut blight, Great spruce bark beetle, and Sudden oak death), Dutch elm disease was by far the most well-known, with 66% reporting to be well informed or very well informed about this disease. The corresponding figure for Ash dieback was 37%, while all other pests and diseases were largely unfamiliar to the sample (over 80% reporting to know nothing of - or to have never heard of - the remaining threats).

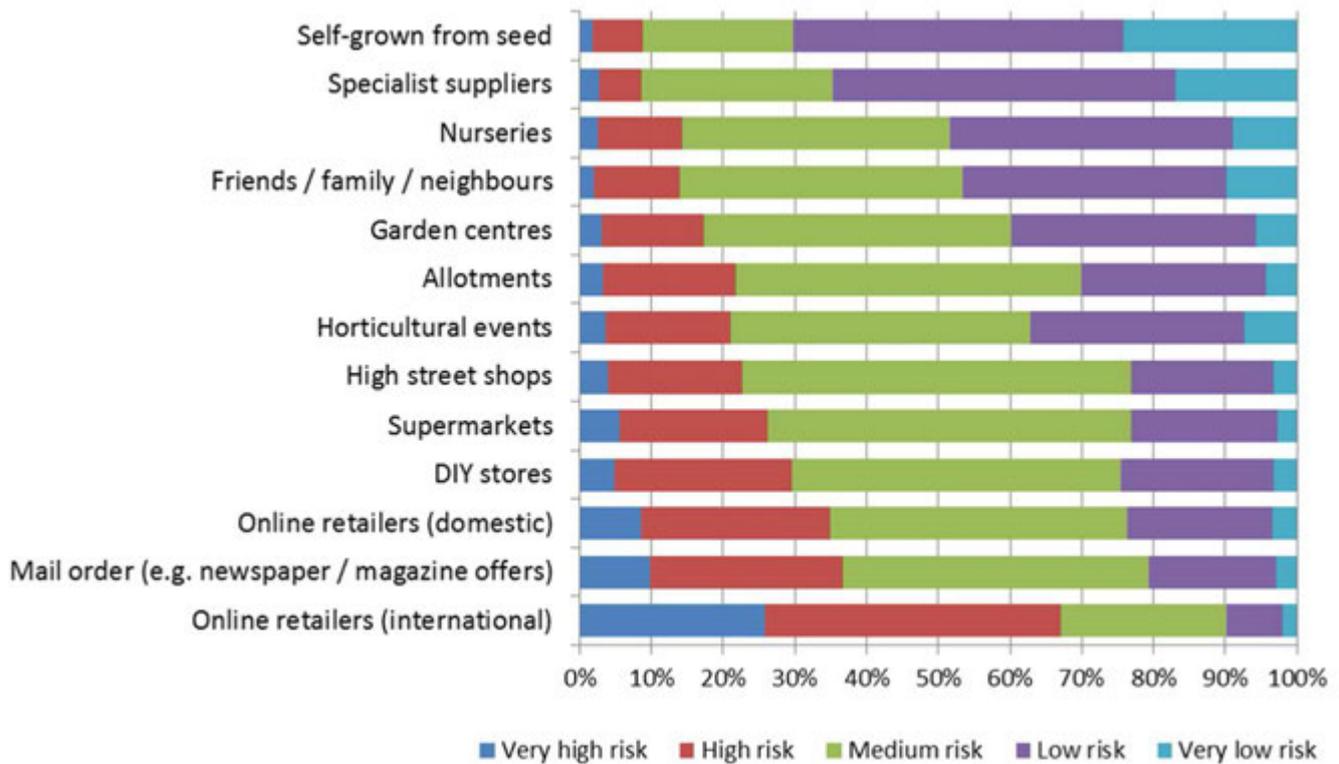


Figure 5. Perceived Pest and Disease Risk from Various Sources

Plants that are self-grown or obtained from a specialist supplier or nursery are perceived to carry the lowest level of pest and disease risk, perhaps because these sources are associated with a degree of horticultural specialism and attention to plant health. At the other extreme, plants obtained from international online retailers are considered to be of greatest risk (67% feeling this source is of high or very high risk) which may reflect the well-established notion that pests and diseases may be introduced from overseas. Of the domestic sources, mail order services and domestic online retailers are perceived to represent the greatest risk. Neither of these sources would typically be associated with public access and so it may be that this lack of scrutiny has come to represent perceptions of enhanced risk. Interestingly, although DIY stores and supermarkets are among the most commonly relied upon sources for obtaining plants, both are associated with a reasonable level of pest and disease risk, with around three quarters of the sample perceiving at least a medium risk from these respective sources. This may be because such non-specialists could be regarded as lacking in expertise and attention when it comes to plants, which typically represent only a fraction of their product range.

Potential for Accreditation

Buying habits for existing accredited/certified products may provide insight into the potential for a corresponding scheme within the plant trade. Consumers were asked whether they buy several accredited/certified products including fair trade coffee, fair trade chocolate, Lion eggs, Soil Association organic produce, Red tractor produce, and timber products produced through Sustainable Forest Management Schemes. Purchasing habits were consistent across the different products. Figure 6 shows a typical breakdown of the responses received, using purchasing of Red tractor produce as an example.

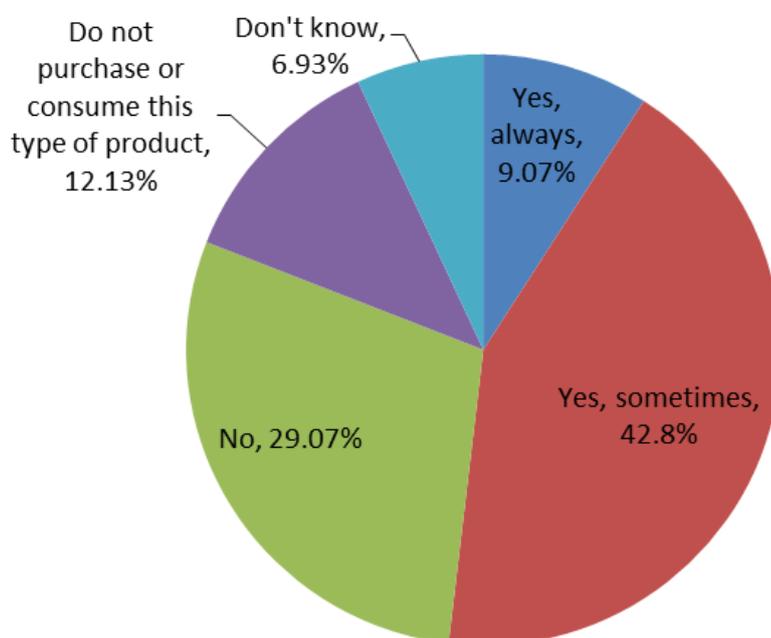


Figure 6. Purchasing of Accredited Products (Red Tractor Produce)

Agreement with a scheme's goals and ideals was the most common reason why respondents chose to buy certain accredited/certified products (38% of the sample having done so). However, a third of the sample (32%) reported purchasing such products because of a belief that a scheme reflected a higher quality product.

Comparatively fewer reasons for why respondents chose not to buy certain accredited/certified products were received. Chief amongst these was an insistence that they had no need for such products, even in a non-accredited form (10%), and because accredited/certified products are too expensive (9%).

Notably, 32% of the sample stated that they give very little or no thought as to whether a product is accredited/certified when making their purchases.

Reactions to the suggestion of an accreditation scheme within the plant trade were primarily positive, with many respondents (38%) noting their support on the grounds that a scheme might protect the wider landscape from the spread of pests and diseases. A further 30% noted they would support a scheme to better ensure a quality product being sold to consumers. While few negative responses were received, a quarter of the sample (25%) reported that although they agree with the principle of a scheme they have concerns over costs being passed to the consumer.

In all, 34% of the sample stated that they would be willing to pay more for the plants if purchased from an accredited source. Similarly, 27% stated that they would be willing to travel further in order to buy plants from an accredited source. In general, those who spend most would be more willing to travel furthest to buy accredited plants (Fig 7).

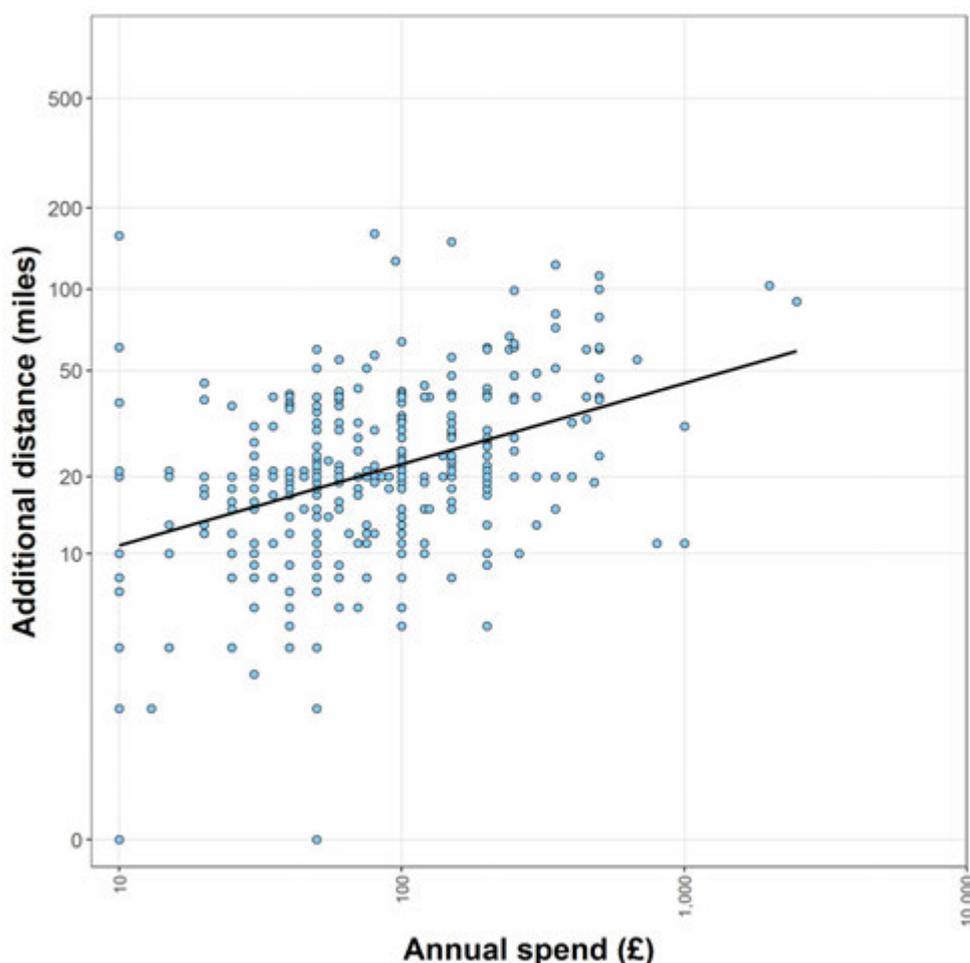


Figure 7. Annual Spend and Willingness to Travel for Accredited Plants

This finding suggests that were a nursery accreditation scheme to be introduced, early adopters in the plant trade may be able to attract new and valuable customers.

PHYTO-THREATS is funded jointly by a grant from BBSRC, Defra, ESRC, the Forestry Commission, NERC and the Scottish Government, under the Tree Health and Plant Biosecurity Initiative.

To learn more about the project please visit:

<https://www.forestry.gov.uk/fr/phytothreats>

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