THE STATE OF SEED SURVEY : BUILDING SEED SOVEREIGNTY ACROSS THE UK

In Spring 2021 the Landworkers' Alliance and the Gaia Foundation Seed Sovereignty Programme worked together to survey farmers and growers across the UK to gather the views and experiences of commercial food producers' access to seed, in particular since the Covid pandemic and Brexit. This report includes an overview of the survey responses, an analysis of the survey results and suggestions for next steps.

Since the start of the Covid pandemic and Brexit, the demand for seed has increased dramatically in just one year. Whilst the proliferation in home gardening and subsistence food production is something to be celebrated and supported, it has also exposed the cracks and fragility of our seed systems. We have seen small scale and agro-ecological seed companies under an intense amount of pressure in the past year as they work hard to meet the unprecedented demand for seed since the Covid pandemic began, whilst Brexit has meant complex regulations and red tape when trying to access seed from Europe. At the same time farmers and growers across the UK are struggling to get the varieties and quantities of seed they need for commercial food production. This has been very worrying and underlies the central but currently precarious role seed sovereignty plays in building food sovereignty and food justice in the UK.

As farmers, growers and seed producers who work with and use seed, we see a need to take action around the availability of organic and open pollinated seed varieties to growers in the UK.. **There is a lot of work that can be done around seed production, access and distribution across the UK.** This survey was designed to gather the views and experiences of farmers and growers using, involved or interested in seeds and use this as a starting point for developing big picture, ambitious projects to **address the challenges to accessing seed that commercial farmers and growers across the UK are facing today.**

This survey was organised and conducted by the Landworkers' Alliance and the Gaia Foundation Seed Sovereignty Programme and was worked on by Dee Butterly (LWA), Sinead Fortune (GF SPP), Kate McEvoy (LWA, Real Seeds), Ashley Wheeler (Trill Farm Market Garden and Seed Grower) and Ronja Schlumberger (Vital Seeds) and Natalia Czarek (LWA).

THE STATE OF SEED
Seed survey responses and analysis

Please note: Not all questions were mandatory so not all participants in the survey answered every question. This is reflected in the results and data we have.

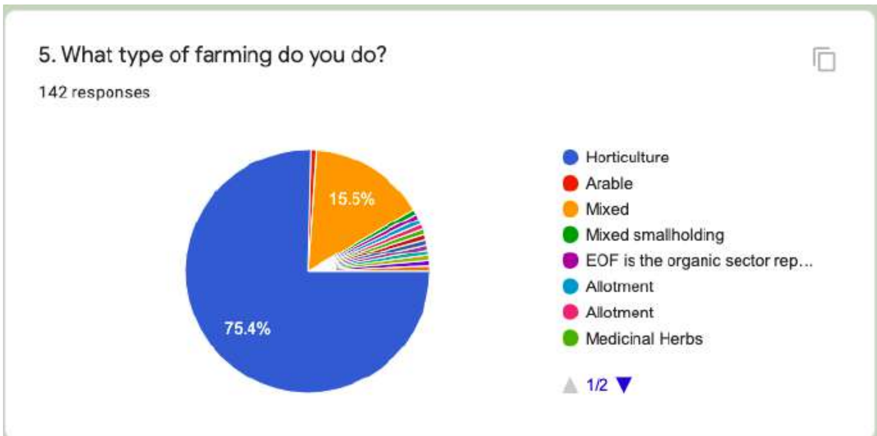
SECTION ONE: DEMOGRAPHIC

Overview of question 1, 2, 3 and 4 finding out who was filling in the survey

142 people responded of whom 90% identified themselves as commercial farmers. Investigation of the 14 who ticked 'no' to 'commercial producer' were mainly social enterprises including Cultivate in Newtown, Caerhys community supported agriculture, and the Locavore growing project Custom Food Lab, so were still in fact producing food at a commercial level.

Question 5: 'What type of farming do you do'

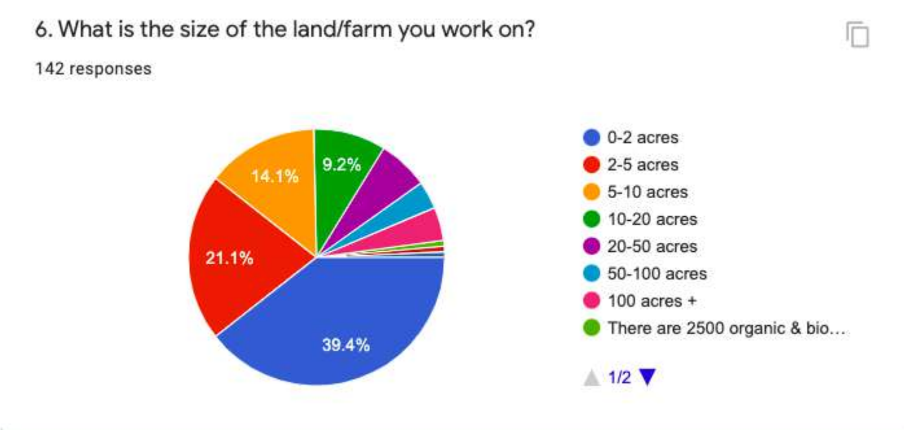
The great majority of the respondents (almost 80%) described their projects as 'horticulture' with most of the rest being mixed farms.



Question 6: 'What is the size of land/farm you work on?'

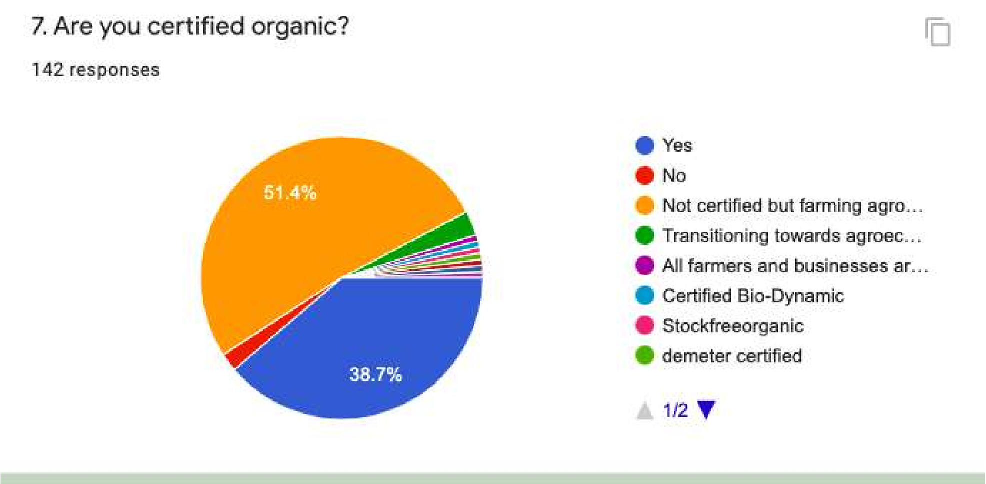
The largest number of respondents have relatively small farms: 40% are on 2 acres or less, and a further 20% 2-5 acres.

However there are a meaningful number of responses from larger scale producers: 20 with 5-10 acres, 9 with 20-50 acres, 5 from 50-100 acres, and 6 over 100 acres,



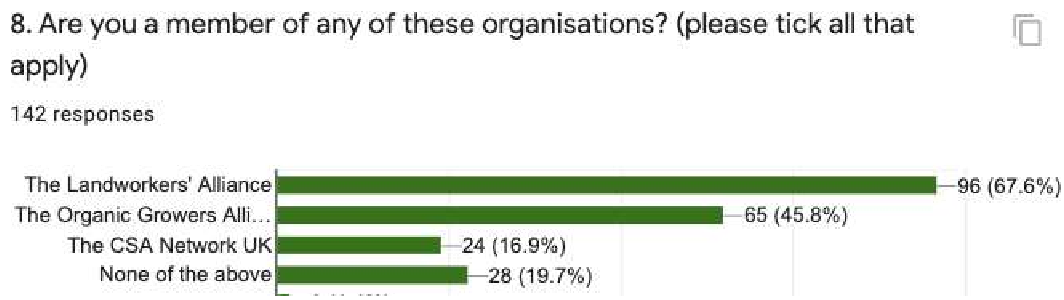
Question 7: 'Are you certified organic?'

59 of the respondents – just under 40% - are certified organic / biodynamic.
Of the rest almost all describe themselves as using organic/agroecological methods but not certified.



Question 8: 'Are you a member of any of these organisations?'

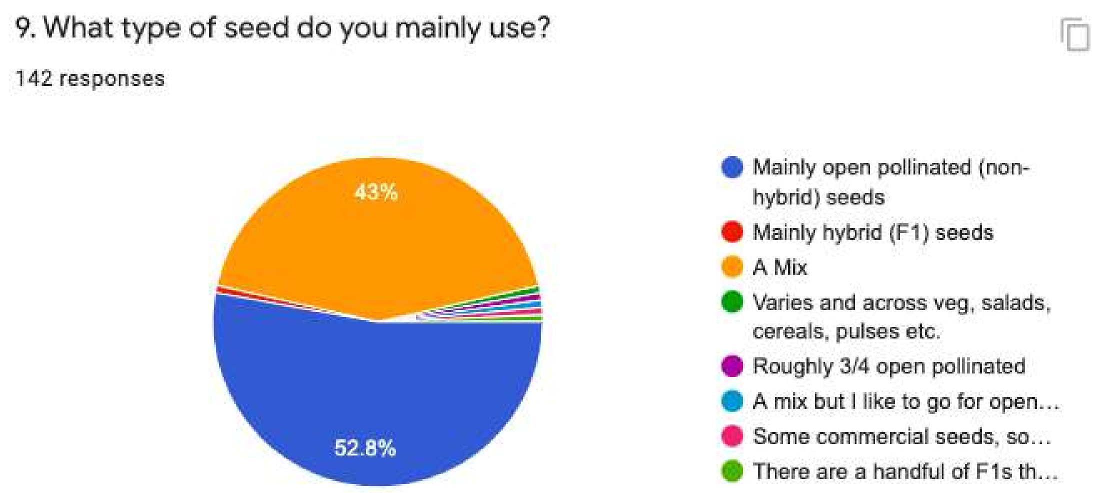
Reflecting where the survey was advertised, most respondents are members of at least one of the LWA (c70%), OGA (c45%), CSA network (c17%).
Around a fifth of respondents don't belong to one of the promoting organisations



SECTION TWO: SEED USE

Question 9: ‘What type of seed do you mainly use?’

The respondents are split fairly evenly between those who mainly use open pollinated seed (OP) at 53% and those who use a mix of OP & F1s at 46%. Only one respondent currently mainly uses hybrids.



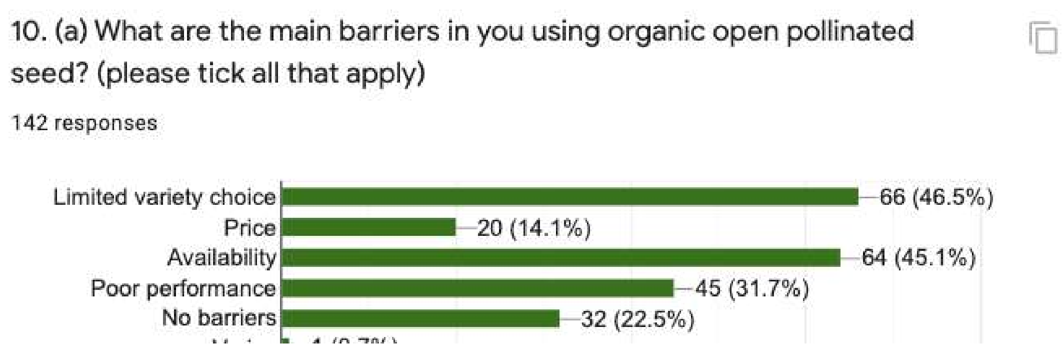
Larger farms are somewhat more inclined to use hybrids:

The smallest farms (<2 acres) 62% use mainly OPs, 2-5 acres 57% use mainly OPs and 5 acres+ 42% use mainly OPs.

Question 10: What are the main barriers in you using organic open pollinated (OP) seed?

A fifth of respondents (as expected mostly those using few hybrids) saw no barriers to using OP seed.

Of those (80%) who did see barriers to using OP seed the most commonly given were seed variety choice (46%) and availability (45%). Poor performance was cited by 31% (and reliability of F1s mentioned in ‘other’ by several respondents)



Asked to expand on the barriers some respondents mentioned issues of availability specifically of larger quantities of seed:

- *“there are few places selling a good variety of seed in quantities needed for larger scale farms”*

In terms of performance, growers had different reasons for choosing F1s – in some cases specific traits not available in OP varieties available:
- *“it's not that open pollinated have consistently poor performance, more that if we have specific problems e.g. clubroot we need F1s for a successful crop”*
- *“we use a lot of F1 seed as we are in a very northerly growing location, and struggle to find OP seed that is acclimatised”*
-*“Needing uniform crops at harvest for 600+ box scheme. Have tried many OP in past but the consistency isn't there for a lot of crops.”*

Other growers cite more general issues:
- *“We have run tests of fruiting vars OP to F1 and found the F1s significantly better on yield....unfortunately!”*
- *“We always look at open pollinated seeds first, but for some crops (e.g. brussels sprouts), the F1 varieties perform much better for us.”*

Question 11 and 12. If you are practicing organic (but not certified), what percentage of organic seed are you using/not using and why?

A lot of respondents gave detailed information about seed varieties in answer to this question. We put them into a spreadsheet which you can see here.

66 out of the 142 respondents identified as agroecological/practicing organic farmers but not certified organic. Even though these holdings aren’t certified organic the average amount of organic seed used per holding was 75%.

%ge of organic seed used (range) by uncertified holdings:

Range	Number of holdings	% of holdings
<25%	8	12%
25-49%	3	5%
50-74%	16	24%
75%+	39	59%
Total	66	

The proportion of organic seed doesn’t seem to vary systematically according to holding size - the smallest holdings and those from 5-10 acres used more organic seed (74% and 80% respectively).

%ge of organic seed used by average size of uncertified holding:

Size of holding	%ge of organic seed used
<2 acres	74%
2-5 acres	62%
5-10 acres	80%
>10 acres	60%

Reasons for using non-organic seed were mixed including:
- because a species (eg Agretti) or a variety (eg Joi Choi, Salanova lettuce) is never available as organic seed
- because of short-term circumstance (eg running out of seed & going to the local garden centre)
- where seed is donated / sourced from seed libraries etc
- because organic seed wasn't available for the desired variety/s this season

Question 13 and 14. If you are certified organic, what percentage of organic seed are you using, and what percentage have derogations?

A lot of respondents gave detailed information about seed varieties in answer to this question. We put them into a spreadsheet which you can see here.

Certified organic holdings as expected use more organic seed, 89% on average.

%ge of organic seed used (range) by certified organic holdings:

Range	Number of holdings	% of holdings
<25%	1	2%
25-49%	0	0%
50-74%	7	12%
75%+	49	86%
Total	57	

Again there was no systematic variation in the percentage of organic seed used by holding size.

%ge of organic seed used by average size of certified organic holding:

Size of holding	%ge of organic seed used
<2 acres	93%
2-5 acres	87%

5-10 acres	95%
>10 acres	87%

Given the need to get derogations for use of non-organic seed, reasons are largely limited to specific varieties not available as organic seed. A few growers noted that this was a particular problem last season due to Covid related shortages.

There were many different varieties mentioned, with only a few repeated mentions (Kalettes, Crown Prince squash, Joi Choi, Agretti)

Both uncertified and certified growers mentioned a particular shortage of choice of flower seed in organic.

Question 15: How much roughly in £ do you usually spend per year on seeds?

Amount	Number of holdings	% of holdings
up to £200	26	20%
£200 - £500	43	32%
£500 - £1000	27	20%
>£1000	37	28%

Even the smallest farms spend a substantial amount on seed (will include more intensive holdings):

Farms that are 0-2 acres have an average spend £469:

Amount	Number of holdings	% of holdings
up to £200	10	20%
£200 - £500	21	42%
£500 - £1000	13	26%
>£1000	6	12%
Total	50	

Farms that were 2-5 acres have an average spend of £784:

Amount	Number of holdings	% of holdings
up to £200	6	12%
£200 - £500	8	16%
£500 - £1000	4	8%
>£1000	11	22%
Total	29	

Farms 5-10 acres have an average spend of £1223:

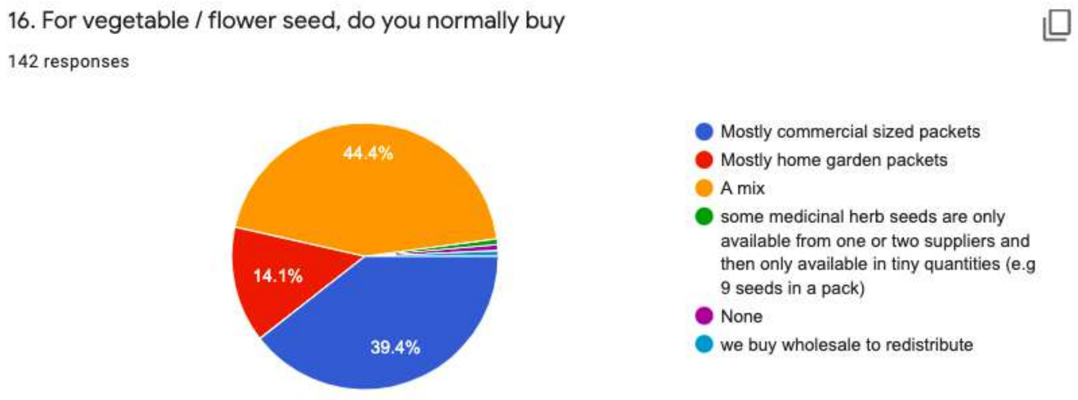
Amount	Number of holdings	% of holdings
up to £200	1	2%
£200 - £500	7	14%
£500 - £1000	5	10%
>£1000	8	16%
Total	21	

Farms 10 acres + have an average spend £1563 (excluding one very large farm spending £250k annually):

Amount	Number of holdings	% of holdings
up to £200	9	18%
£200 - £500	7	14%
£500 - £1000	5	10%
>£1000	11	22%
Total	32	

Question 16: What size packets of seeds do you normally buy?

Many farms of all sizes buy at least some seed in home garden sized packets



By size of holding:

0-2 acres:

Type of seed packet	Number of holdings	% of holdings
Mostly commercial seed packets	17	34%
Mostly home garden seed packets	8	16%
Mix	25	50%
Total	50	

2-5 acres:

Type of seed packet	Number of holdings	% of holdings
Mostly commercial seed packets	10	35%
Mostly home garden seed packets	5	17%
Mix	14	48%
Total	29	

5-10 acres:

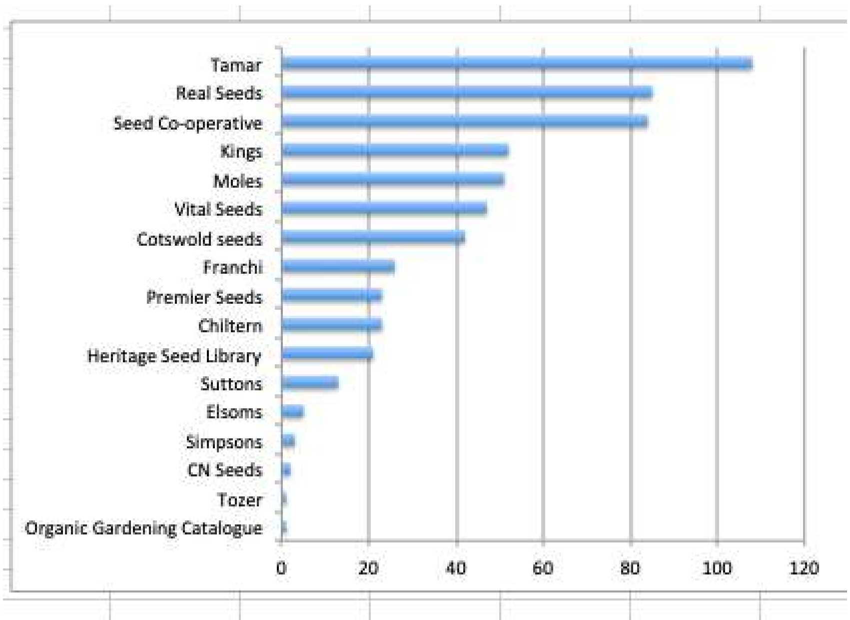
Type of seed packet	Number of holdings	% of holdings
Mostly commercial seed packets	13	62%
Mostly home garden seed packets	0	0%
Mix	8	38%
Total	21	

>10 acres:

Type of seed packet	Number of holdings	% of holdings
Mostly commercial seed packets	15	45%
Mostly home garden seed packets	4	12%
Mix	14	43%
Total	33	

Question 17: What UK companies do you usually buy seeds from?

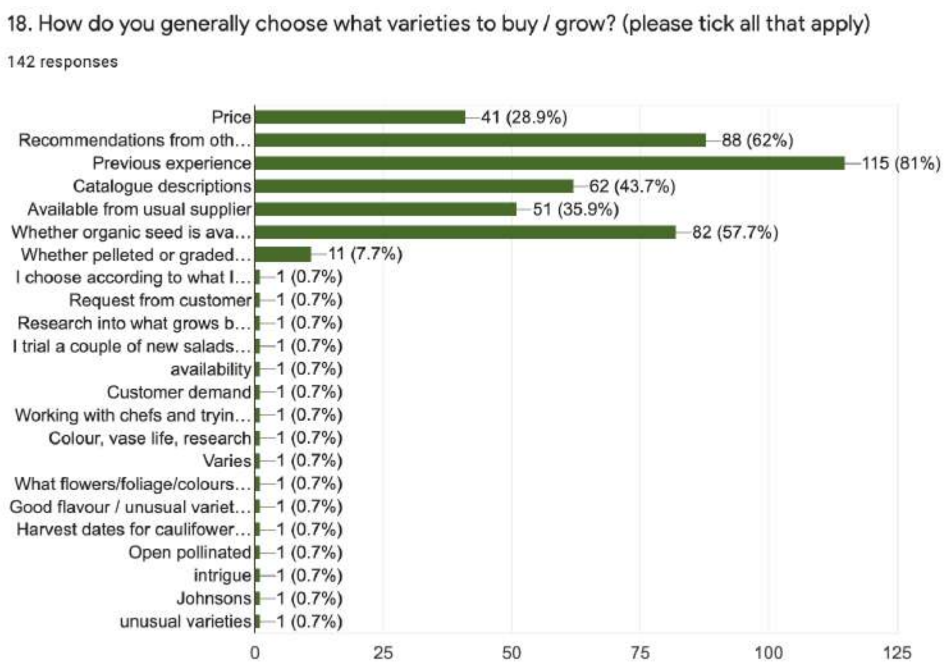
Farms buy from many different sources, with the most common being the following agroecological seed suppliers:



Seed companies used by 5 or more respondents:

Seed company	Number of respondents	%ge of respondents
Tamar	108	78%
Real Seeds	85	61%
Seed Co-operative	84	60%
Kings	52	37%
Moles	51	37%
Vital Seeds	47	34%
Cotswold Seeds	42	30%
Franchi	26	19%
Chiltern	23	17%
Premier Seeds	23	17%
Heritage Seed Library	21	15%
Suttons	13	9%
Elsons	5	4%

Question 18: How do growers choose varieties?



Main reasons/motivations for buying/using particular seed varieties:

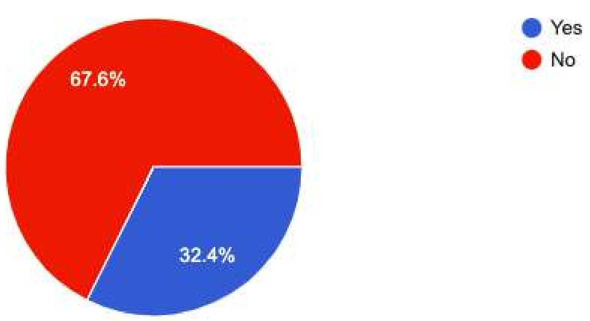
Reasons/motivations	Number or respondents	% of respondents
Previous experience	113	86%
Recommendations from other growers	87	66%
Whether organic seed is available	80	61%
Catalogue descriptions	62	47%
Available from usual supplier	51	39%
Price	40	31%
Whether pelleted or graded seed available	11	8%
Customer demand	1	1%

<u>Question 19 and 20: Have you bought / do you buy seeds from companies outside the UK, and if yes which ones?</u>

A lot of respondents gave detailed information about seed varieties and seed companies in answer to this question. We put them into a spreadsheet which you can see [here.](#)

19. Have you bought / do you buy seeds from companies outside the UK?

142 responses

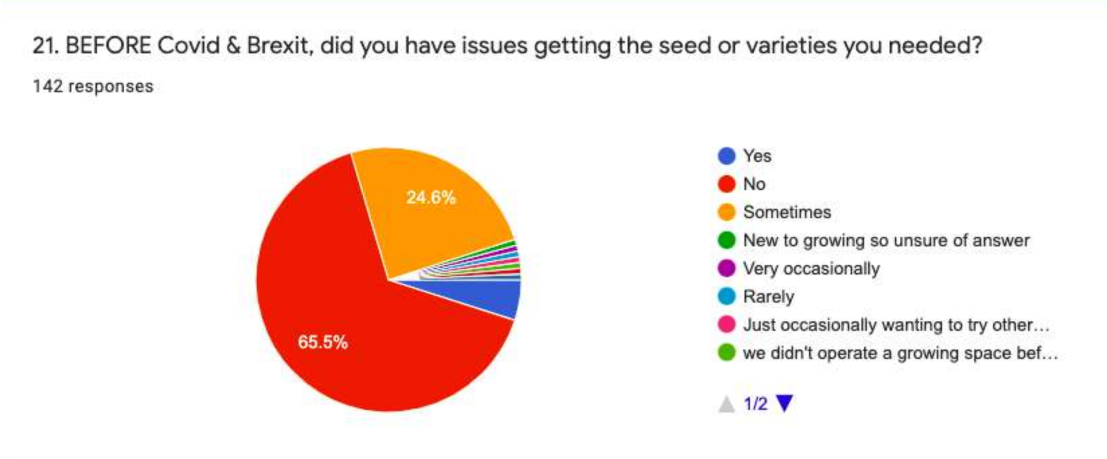


Around a third of growers have bought seeds from outside the UK, using a wide range of suppliers including the EU biodynamic companies (Sativa & Bingenheimer in particular) and US market garden specialists (Wild Garden Seeds, Johnnies, Adaptive Seeds).

Question 21 and 22. BEFORE Covid & Brexit, did you have issues getting the seed or varieties you needed?

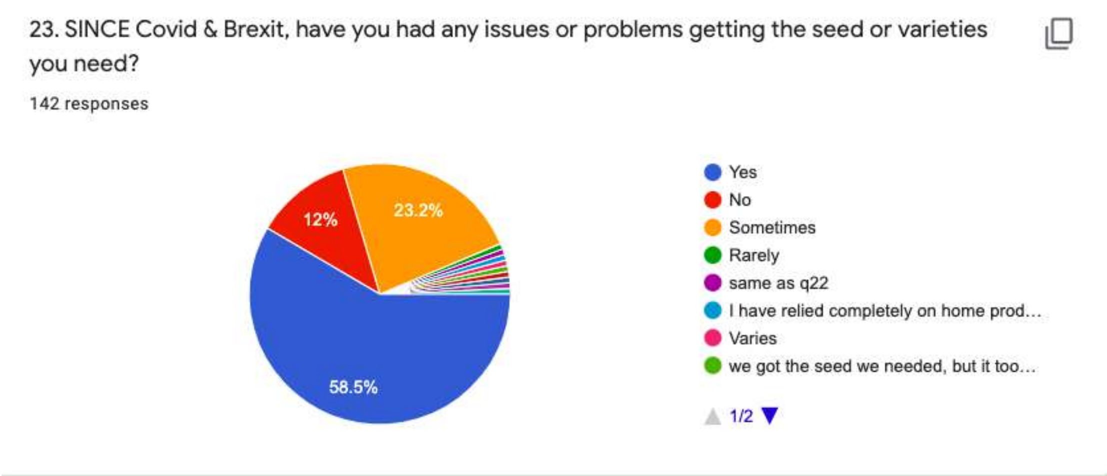
In previous years, pre-COVID / Brexit, on the whole most growers were able to access the seed / varieties that they needed for their business, with 65% reporting no issues, and only 7% experiencing consistent problems.

However a quarter did report sometimes having problems getting their desired varieties, with issues including organic seed selling out early, varieties being discontinued, or (where conventional seed was concerned) lack of untreated seed.



SECTION THREE: COVID, BREXIT AND SEED SUPPLY

Question 23 and 24. SINCE Covid & Brexit, have you had any issues or problems getting the seed or varieties you need?



Unsurprisingly given the well reported shortages of seed the position has been reversed since Covid/Brexit, with over 80 % of respondents saying 'yes' or ‘sometimes’ when asked whether they had had problems accessing the seed needed.

Since Brexit and Covid have you had issues getting the seed or varieties you needed?

Response	Number of respondents	% of respondents
Yes	83	59%
Sometimes	30	24%
No	15	12%
Other		5%
Total	128	

The most frequent problem reported was either not being able to get the varieties wanted, or simply the difficulty of ordering any seed at all:

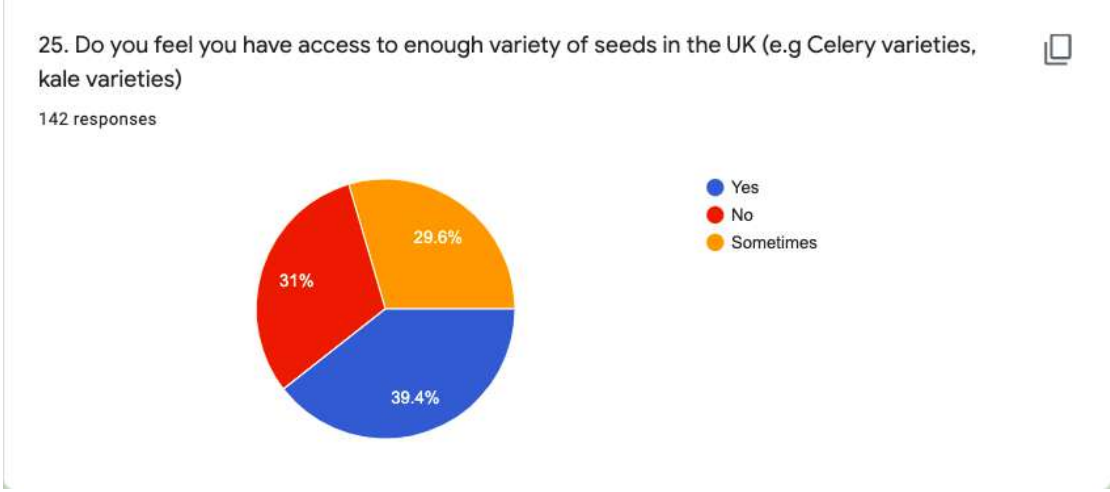
Issue with accessing seed	Number of respondents	% of respondents
Varieties wanted not available / sold out	64	57%
Online shops closed / hard to order seed	45	40%
Delivery times longer than normal affecting planting schedules	19	17%
Not able to order from EU	11	10%
Quantities needed not available	10	9%
Price rises	3	3%
Companies no longer shipping to NI	1	1%

Note: respondents could give more than one reason

SECTION FOUR: ACCESS TO SEED, SEED AVAILABILITY AND SEED VARIETIES

25. Do you feel you have access to enough variety of seeds in the UK?

Interestingly on the whole the range of varieties is more of an issue for growers than volume of seed available. In question 24 only 9% of respondents said they had issues over quantities available, whereas in question 25 70% of respondents said they did not have enough access to variety of seeds.

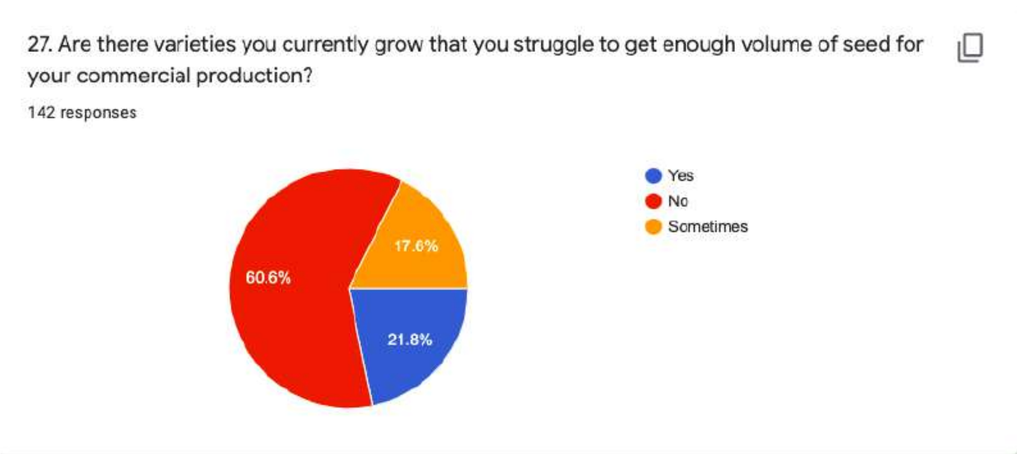


Question 26: If you answered 'no' or 'sometimes' to question 25 what crops would like to have more varieties of (e.g Celery varieties, kale varieties?)

A lot of respondents gave detailed information about seed varieties in answer to this question. We put them into a spreadsheet which you can see here.

Question 27 and 28: Are there varieties you currently grow that you struggle to get enough volume of seed for your commercial production, and if yes which ones?

A lot of respondents gave detailed information about crop varieties and seed companies. We put them into a spreadsheet which you can see here.

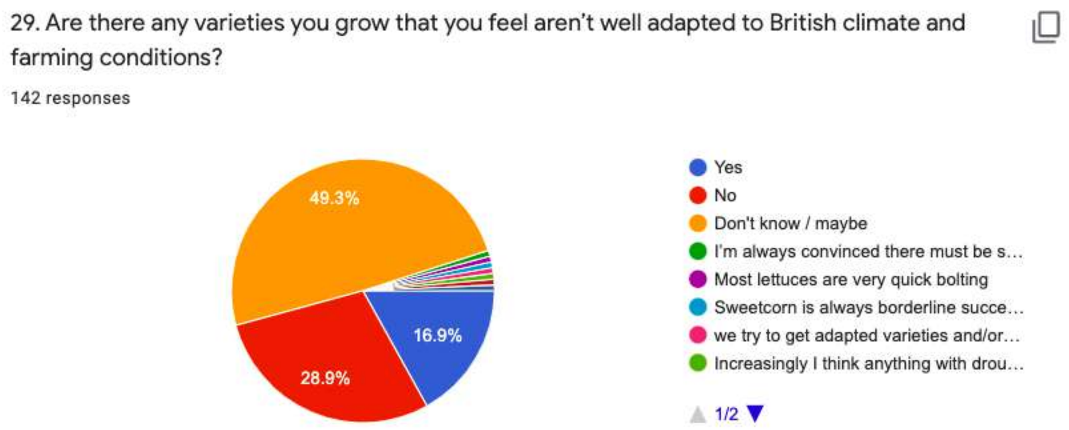


There wasn't a strong feeling overall about lack of suitability for UK conditions, but of those growers who did report issues, they were often around more localised needs, and a desire for variety trials / selection within regions.

The lack of seed selected / trialed for Scottish growing conditions was mentioned by several growers there.

Question 29 and 30. Are there any varieties you grow that you feel aren't well adapted to British climate and farming conditions, and if yes which ones?

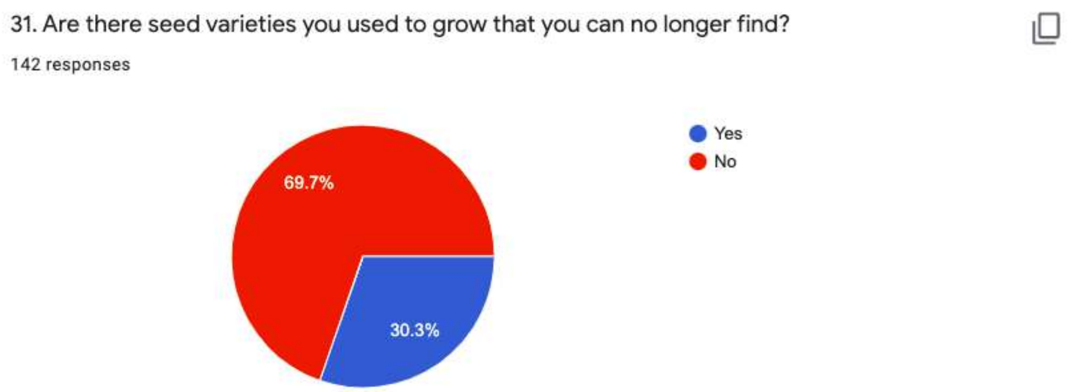
A lot of respondents gave detailed information about seed varieties in answer to this question. We put them into a spreadsheet which you can see [here.]



Question 31 and 32. Are there seed varieties you used to grow that you can no longer find, and if so which ones?

A lot of respondents gave detailed information about seed varieties in answer to this question. We put them into a spreadsheet which you can see [here.]

Over 30% of respondents, or 1 in 3 said there are varieties they use to grow they can longer find. This is actually quite high.

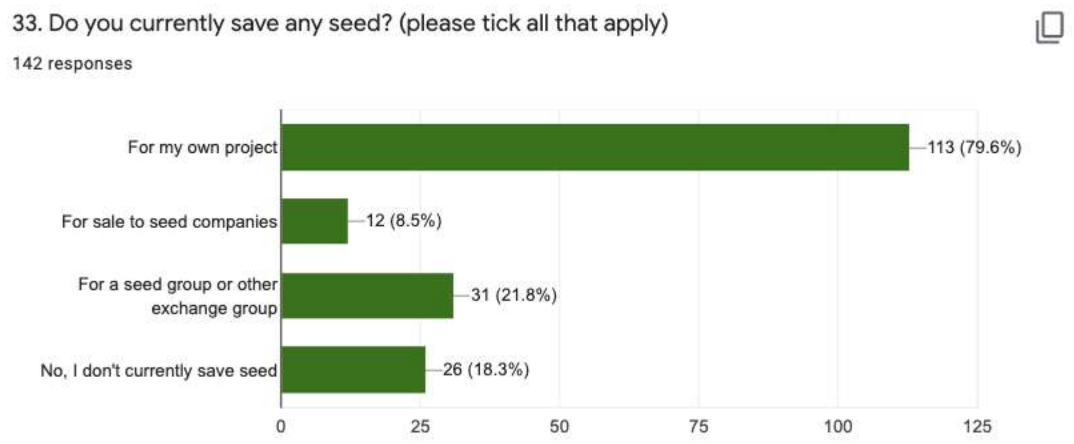


SECTION FIVE: SEED SAVING

Question 33. Do you currently save any seed? (please tick all that apply)

Obviously the survey has attracted those with an interest in seed, but encouragingly over 80% of respondents - 113 growers - already save at least some seed. This is mainly for their own project / growing use (80%) but also for exchange (20%) and in the case of 12 respondents for sale.

Growers save a wide variety of seeds, but particularly tomatoes & flowers.



Question 34. If you do save seed, what crops/varieties do you produce and save from?
A lot of respondents gave detailed information about seed varieties in answer to this question. We put them into a spreadsheet which you can see here.

Question 35. If you don't save seeds, what are the barriers?
Of the 55 growers giving reasons why they don't save seed (or don't save as much as they would like) time / mental space was the most common reason, with 21 growers (38%) citing lack of knowledge, and 13 (24%) a shortage of growing space.

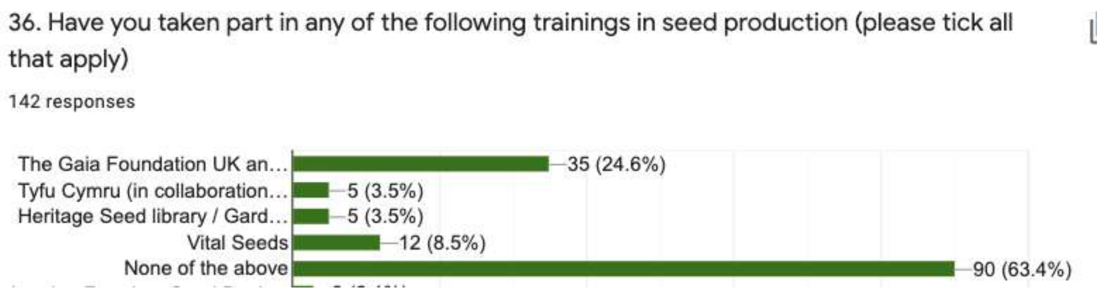
Reasons for not saving seeds:

Reason for not saving seed	Number of respondents	%ge of respondents
Time / headspace	34	62%
Knowledge / skills	21	38%
Lack of growing space	13	24%

Concern about quality / confidence in seeds	5	9%
Drying space / facilities / storage	5	9%
Equipment	3	5%
Prefer to support seed producers	3	5%
Isolation distances not viable / doesn't work in rotations	3	5%
Climate	2	4%
Rodents	1	2%
Total	90	

<u>Question 36. Have you taken part in any of the following trainings in seed production (please tick all that apply)</u>

Just over a third of respondents (52 respondents) have received some training in seed production already, mainly via Gaia (35 respondents) or Vital Seeds (12 repondents)

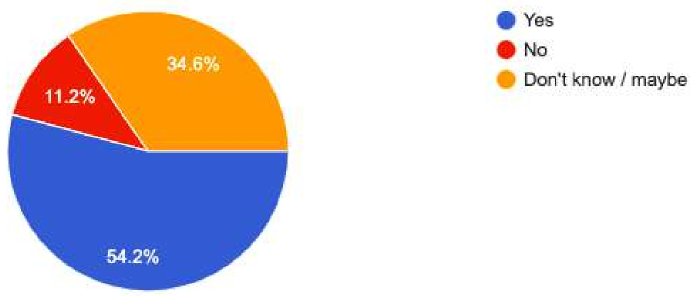


<u>Question 37. If you have not taken part in any seed production training, would you like to take part in one of the programmes listed above in question 36?</u>

Of the remaining growers, more than half (55 respondents) said that they would be keen to take part in training in the future.

37. If you have not taken part in any seed production training, would you like to take part in one of the programmes listed above in question 36?

107 responses



SECTION SIX: REFLECTIONS AND NEXT STEPS

Question 38 and 39. Are there ways the Landworkers' Alliance could have supported you this past year (or in the future) to access seed?

Only 25 respondents (under a fifth) thought that the LWA could have definitely been helpful in the last year in accessing seed, with the largest number (88) unsure as to whether the LWA could have helped .

38. Are there ways the Landworkers' Alliance could have supported you this past year (or in the future) to access seed?

142 responses

38 growers had suggestions as to how the LWA could help access seed. The most common suggestion was providing / funding seed saving training. Several growers also suggested collating information on availability, & organising group seed buying.

Suggestions/ideas	Number of respondents	%ge of respondents
Providing seedsaving / funding seedsaving training / encouraging peer-to-peer learning	11	29%
Collating information on availability	7	18%
Group seed buying	6	16%
Lobbying around import rules & other seed sov issues	4	11%
Try to organise preferential access to seed companies in times of excess demand	4	11%
Encourage / support new seed companies / increased production of organic seed (by someone other than the respondent!) / CSA type seed production?	4	11%
Organise exchanges / seedbank / swaps	3	8%
Organising seed variety trials	2	5%
Awareness raising	2	5%
Information & signposting	1	3%

Question 40. Would you like to receive the results of the survey and attend a discussion on next steps?

134 respondents (95%) said they would like to stay engaged in the next steps and outcomes of the survey.

REFLECTIONS AND FEEDBACK

We received useful feedback that this survey didn't really cover grain, green manures or potato seed. This is true, and our reflection was that we wanted to focus on vegetable seed for the purpose of this survey and potential projects we could run as outcomes and next steps from this work.
However, we acknowledge the importance of focusing on other types of seed supply in farming and the Landworkers' Alliance and the Gaia Foundation Seed Sovereignty Project are currently collaborating with the UK Grain Lab through a Farming the Future funded project on building Seed Sovereignty in the UK.

If you have any questions or would like to talk more about our findings please get in touch with us at:

Dee.butterly@landworkersalliance.org.uk and/or sinead@gaianet.org

Many thanks
The Landworkers Alliance and the Gaia Foundation Seed Sovereignty Programme.