

# UK Annual Non-Organic Seed Authorisation Report for 2022

UK\* authorisations to use seed and seed potatoes and vegetative propagating material not produced by the organic production method in organic farming

\*(UK apart from Northern Ireland. In order to align with current (at time of writing) trading arrangements with the EU, there is a separate report for Northern Ireland. Throughout this report “the UK” is to be understood as “the UK apart from Northern Ireland”)



Prepared by the Soil Association on behalf of Defra  
March 2023

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## Purpose of the report

The UK non-organic annual seed authorisation reports (this report together with the Northern Ireland report) provide information on the quantities and varieties of non-organic seed used by organic farmers and growers.

This information is intended for use by the seed industry, producers, policy makers and organic control bodies (CBs) to increase use of organic seed and comply with relevant regulatory requirements. The objective is to expand the diversity, quantity and quality of organic seed availability so that authorisations for the use of non-organic seed would only need to be given in extreme circumstances. The report also helps to make the sector transparent to buyers and suppliers of seed and consumers.

The reports are compiled by the Soil Association on behalf of Defra. They are then made publicly available via the *Organic X Seeds* website (<https://www.organicxseeds.co.uk/>).

## Summary of authorisations

The total number of non-organic seed authorisations issued to organic farmers in the United Kingdom increased from 16,598 in 2021 to **17,259** in 2022.

# Seed Potatoes

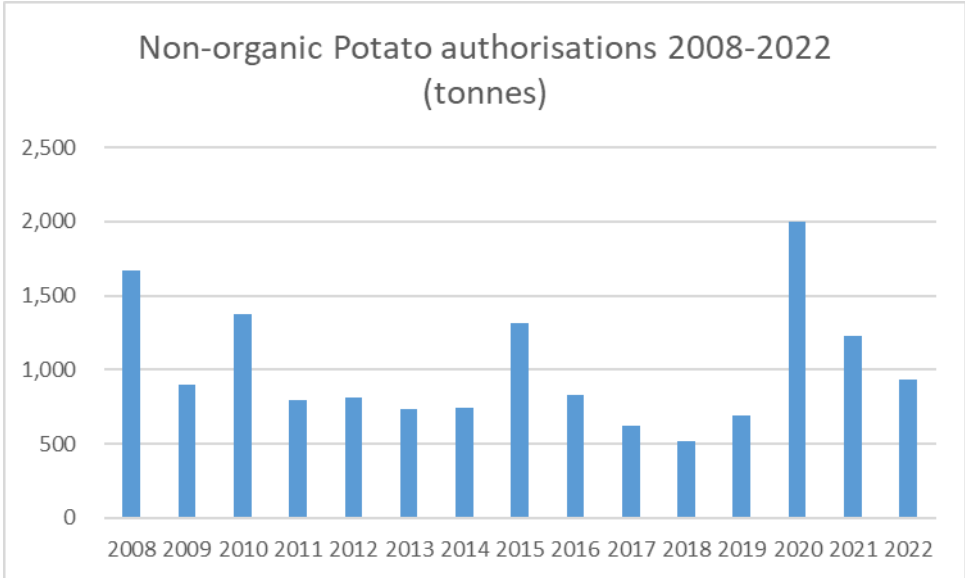
The total number of potato authorisations granted in 2022 was **104**, a decrease on the previous year’s figure of 115. The total volume for 2022 was **930 tonnes**, a corresponding decrease on 2021’s total of 1,232 tonnes. The longer-term fluctuations are shown in graphs 1 and 2 and the overall figures for the last four years are given in Table 1 below.

The authorisations were spread over a total of 50 varieties. Table 2 shows details of the largest 16 varieties, together with comparisons for those varieties from 2021 and 2020.

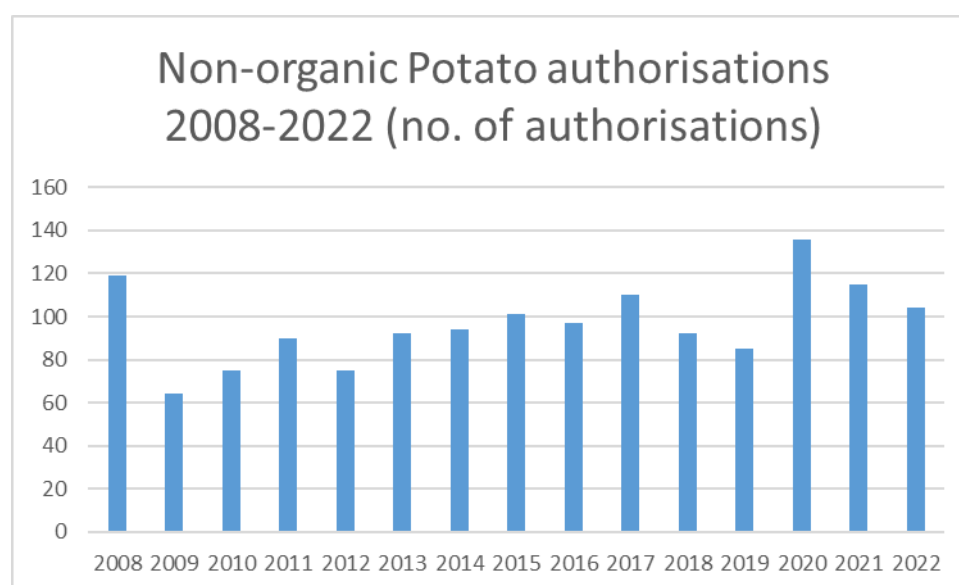
**Table 1: Non-organic seed potato authorisations issued to UK organic farmers 2019-2022 (all varieties)**

	2019	2020	2021	2022
<b>number of varieties</b>	57	68	63	<b>50</b>
<b>total tonnes</b>	695	1,999	1,232	<b>930</b>
<b>total authorisations</b>	85	136	115	<b>104</b>

**Graph 1: Non-organic seed potato authorisations, 2008-2022**



**Graph 2: Non-organic seed potato authorisations, 2008-2022**



**Table 2: Non-organic seed potato authorisations 2022: top varieties (over 10 tonnes), with comparisons for those varieties in 2020 and 2021**

	2020		2021		2022	
	auths	tonnes	auths	tonnes	auths	tonnes
<b>Acoustic</b>	3	45.0	5	67.3	<b>12</b>	<b>151.9</b>
<b>Valor</b>	9	204.0	6	154.3	<b>7</b>	<b>126.3</b>
<b>Lady Balfour</b>	3	270.0	2	104.0	<b>2</b>	<b>100.0</b>
<b>Athlete</b>	4	90.5	5	114.0	<b>3</b>	<b>76.5</b>
<b>Marfona</b>	5	68.0	2	43.0	<b>2</b>	<b>76.3</b>
<b>Jersey Royal</b>	2	100.0	3	102.0	<b>3</b>	<b>72.0</b>
<b>Rooster</b>	2	97.0	1	60.0	<b>4</b>	<b>60.1</b>
<b>Gatsby</b>	1	5.0	1	0.0	<b>2</b>	<b>43.0</b>
<b>Alexia</b>	2	242.0	1	100.0	<b>1</b>	<b>28.0</b>
<b>Kelly</b>	2	52.5	2	30.0	<b>1</b>	<b>25.0</b>
<b>Orla</b>	3	23.0	3	32.5	<b>3</b>	<b>21.5</b>
<b>Charlotte</b>	9	28.1	5	17.1	<b>3</b>	<b>20.1</b>
<b>Jester</b>	2	109.5	1	27.5	<b>2</b>	<b>20.0</b>
<b>Maris Peer</b>	2	160.0	3	73.5	<b>2</b>	<b>20.0</b>
<b>Cara</b>	3	35.0	2	10.0	<b>3</b>	<b>13.0</b>
<b>Sorrento</b>	1	10.0	2	7.0	<b>1</b>	<b>11.0</b>

## Arable and cereal crops

The total number of authorisations for the crops given in table 3 was 854, up from 693 in 2021. The volume for 2022 was 1,988 tonnes as compared to 1,430 tonnes in 2021<sup>1</sup>. There is proportional fluctuation between the different crops from year to year as shown in Table 3 and graphs 3-5.

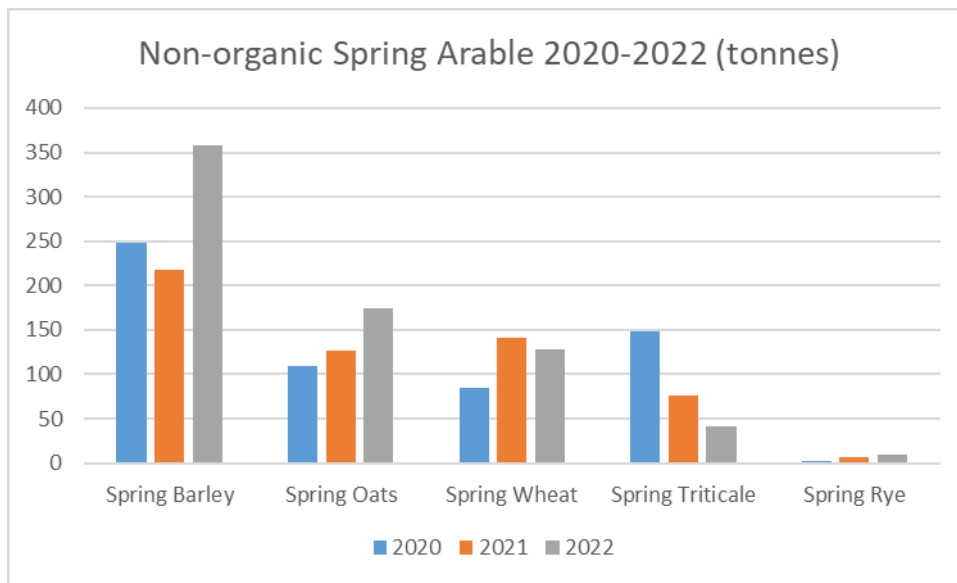
**Table 3: Non-organic arable seed used by UK organic farmers: 2020 to 2022**

	2020		2021		2022		% change 2021-22	
	auths	tonnes	auths	tonnes	auths	tonnes	% auths	% tonnes
Field Pea	167	168.91	215	281.35	<b>299</b>	<b>410.74</b>	39.1	46.0
Spring Barley	57	248.34	55	218.38	<b>116</b>	<b>357.63</b>	110.9	63.8
Winter Wheat	44	58.49	137	146.06	<b>94</b>	<b>302.38</b>	-31.4	107.0
Field Bean	21	72.87	49	160.68	<b>44</b>	<b>225.70</b>	-10.2	40.5
Spring Oats	30	108.99	32	127.28	<b>71</b>	<b>174.59</b>	121.9	37.2
Spring Wheat	19	84.32	19	141.32	<b>20</b>	<b>127.84</b>	5.3	-9.5
Winter Rye	38	25.65	52	60.14	<b>64</b>	<b>105.89</b>	23.1	76.1
Winter Oats	22	112.95	16	51.81	<b>22</b>	<b>103.00</b>	37.5	98.8
Winter Barley	33	101.49	35	145.47	<b>44</b>	<b>94.64</b>	25.7	-34.9
Spring Triticale	56	149.02	66	76.42	<b>56</b>	<b>40.89</b>	-15.2	-46.5
Winter Triticale	9	22.30	7	8.49	<b>14</b>	<b>27.79</b>	100.0	227.5
Spring Rye	8	2.50	7	6.72	<b>6</b>	<b>9.00</b>	-14.3	34.0
Spelt	5	20.80	3	5.74	<b>4</b>	<b>8.10</b>	33.3	41.1
<b>Totals:</b>	<b>509</b>	<b>1,177</b>	<b>693</b>	<b>1430</b>	<b>854</b>	<b>1,988</b>	<b>426</b>	<b>681</b>

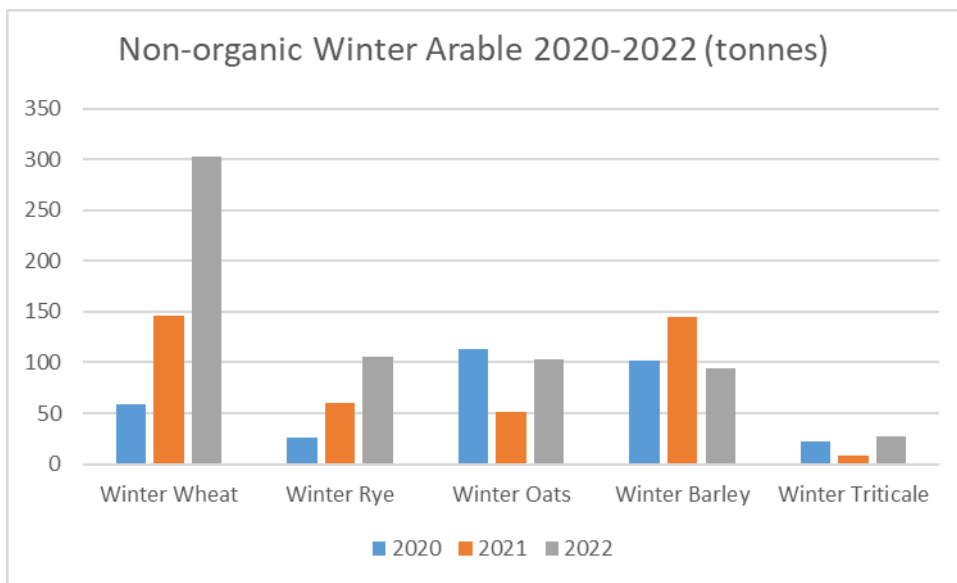
*(Note: some small authorisations were given in seeds for bean, pea, winter barley and winter rye. These have been converted to kg and added to the totals)*

<sup>1</sup> Because of a slightly more inclusive list of crops in this year's table 3, the totals for 2021 authorisations given here are slightly different to those in last year's report.

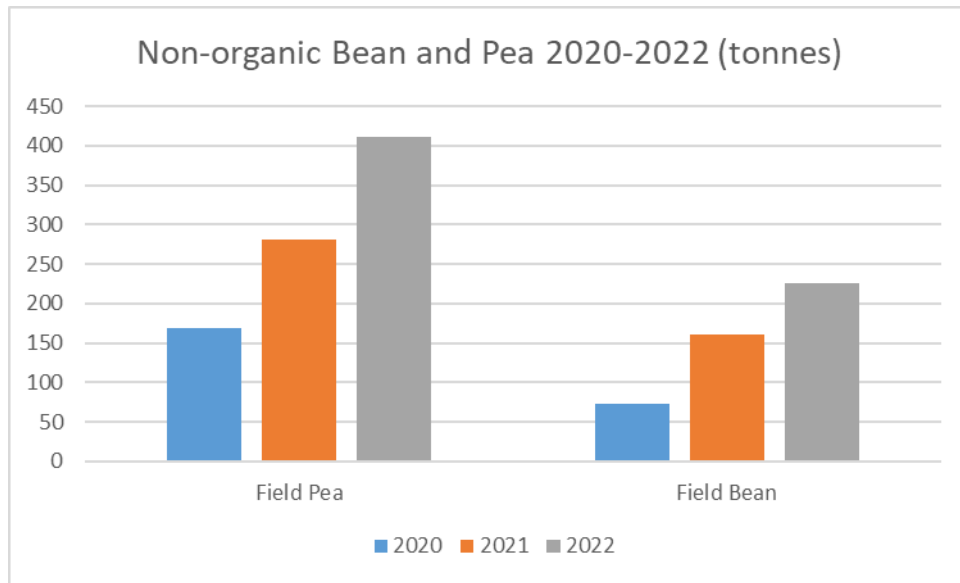
**Graph 3: Comparison of non-organic spring arable seed authorisations**



**Graph 4: Comparison of non-organic spring arable seed authorisations**



**Graph 5: Comparison of non-organic spring arable seed authorisations**





## Horticulture

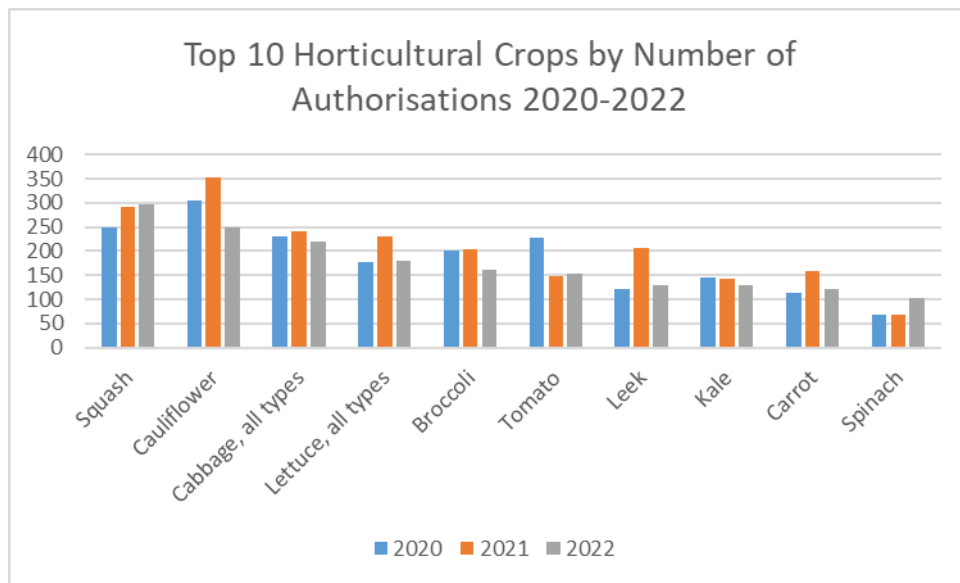
Table 4 and Graph 6 show comparisons for some of the major vegetable crops. The total of authorisations for the species in Table 4 was 2,299 rising from 2,708 in 2021 and 2,452 in 2020 and 2,039 in 2019.

However, it remains almost impossible to show a simple comparison and analysis of authorisations for the horticultural sector due to the huge range of different crops and varieties, which are sold and recorded using different units of measurement (by weight, number of seeds/plants).

**Table 4: Summary data for selected horticultural crop species in 2022 compared with 2020 and 2021**

	2020			2021			2022		
	auths	kg	seeds	auths	kg	seeds	auths	kg	seeds
Asia Greens	47	4.22	37,373,317	51	98.05	43,960,318	45	24.470	1,060,144
Beetroot	72	37.15	35,860,583	92	92.45	91,068,146	75	515.606	49,811,481
Broccoli	202	0.04	30,918,051	205	12.62	40,186,455	160	0.15	28,664,423
Brussels Sprouts	61	0.06	273,078	56	-	358,517	42	-	353,262
Cabbage, all types	231	41.72	10,911,201	242	6.20	10,769,825	219	48.495	54,136,636
Carrot	112	0.02	1,086,750,802	159	0.13	1,080,042,260	120	0.803	846,484,689
Cauliflower	304	0.05	8,763,071	353	7.57	10,759,534	249	-	11,842,623
Chard	60	13.81	17,640,940	63	8.40	19,541,120	35	8.920	12,947,856
Chilli Pepper	61	0.05	7,279	94	0.01	22,459	63	0.005	6,926
Courgette	79	35.07	613,568	88	66.46	548,943	78	31.930	761,109
Kale	144	126.71	5,051,848	143	85.61	2,878,216	128	66.601	3,606,289
Leek	121	0.25	19,495,256	206	120.02	27,012,598	129	0.008	10,448,710
Lettuce, all types	176	0.23	72,333,222	230	20.07	124,641,024	179	3.463	142,031,960
Pak Choi	55	0.74	373,904	54	1.12	5,269,978	43	3.866	433,138
Pea	30	4,908.90	1,408,210	25	26.77	404,950	42	941.240	2,406,100
Quinoa	63	1,643.96	-	66	1,935.15	200	74	974.165	30
Spinach	67	0.02	947,630,500	68	35.12	1,628,953,200	103	0.025	1,216,451,000
Squash	249	0.79	828,685	292	2.91	1,257,606	298	0.832	468,171
Sweetcorn	91	6.10	3,747,742	74	-	1,853,067	63	30.033	2,291,752
Tomato	227	0.04	376,786	147	0.01	402,533	154	0.007	211,223
<b>Totals:</b>	<b>2,452</b>			<b>2,708</b>			<b>2,299</b>		

**Graph 6: Non-organic vegetable seed authorisations comparison**



## Fruit

Table 5 shows comparisons for the main fruit crops. The total of authorisations for the species in Table 5 was 237 rising from 223 in 2021 and 186 in 2020.

**Table 5: Summary of non-organic fruit authorisations, selected crops, 2020-2022**

	2020		2021		2022		
	Auths	plants etc	Auths	plants etc	Auths	plants etc	other
<b>Apple</b>	75	8,409	95	2,552	132	3,464	-
<b>Apricots</b>	-	-	-	-	4	8	-
<b>Blackberry</b>	-	-	1	5	-	-	-
<b>Blackcurrant</b>	10	48,655	4	22	4	31	-
<b>Blueberry</b>	8	58,244	10	17	1	28	-
<b>Cherry</b>	7	553	17	13,134	18	1,201	2,000 seeds
<b>Chuckleberry</b>	1	8,000	-	-	-	-	-
<b>Gooseberry</b>	7	24,108	10	80	3	26	-
<b>Grape</b>	11	16,450	4	925	6	2,757	-
<b>Melon</b>	-	-	16	3,670*	-	-	-
<b>Mulberry</b>	-	-	2	9	3	12	-
<b>Peach</b>	2	10	1	1	2	2	-
<b>Pear</b>	14	754	13	4,311	20	1,048	-
<b>Plum</b>	22	403	16	5,398	25	665	4,000 seeds
<b>Raspberry</b>	15	2,456	12	868	4	84	-
<b>Red/Whitecurrant</b>	5	24,004	7	25	1	8	-
<b>Strawberry</b>	8	5,600	13	204	13	1,905	5,200 seeds
<b>Tayberry</b>	1	10	2	6	1	12	-
				* seeds			
<b>Totals:</b>	186		223		237		

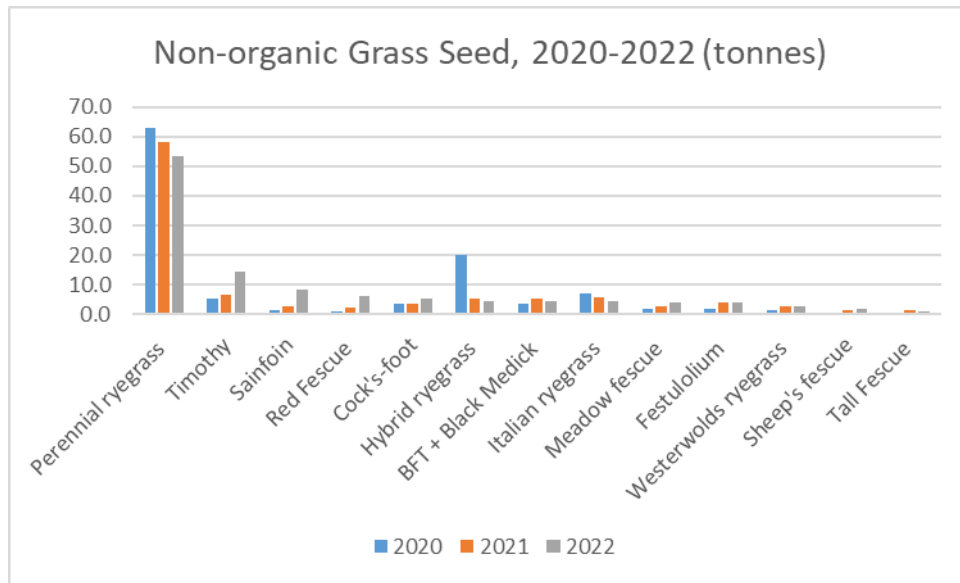
## Grass Seed

Table 6 shows comparisons for the main grass type crops. The total of authorisations for the species in Table 6 was 2,652 rising only slightly from 2,643 in 2021. The total volume for 2022 of 115 tonnes, and increase on 2021's total of 102, though that was itself a drop from 2020's total of 111 tonnes.

**Table 6: Comparison of non-organic grass seed authorisations (major crops)**

	2020		2021		2022		% Change 2021-22	
	auths	tonnes	auths	tonnes	auths	tonnes	auths	tonnes
<b>Perennial ryegrass</b>	1,353	62.90	1,305	57.99	<b>1,014</b>	<b>53.34</b>	-22	-8.02
<b>Festulolium</b>	36	1.72	72	3.96	<b>99</b>	<b>3.89</b>	38	-1.92
<b>Cock's-foot</b>	117	3.63	107	3.61	<b>138</b>	<b>5.49</b>	29	52.06
<b>Timothy</b>	254	5.43	309	6.65	<b>330</b>	<b>14.56</b>	7	118.96
<b>Hybrid ryegrass</b>	129	19.89	129	5.32	<b>104</b>	<b>4.64</b>	-19	-12.77
<b>Westerwolds ryegrass</b>	16	1.38	41	2.59	<b>33</b>	<b>2.82</b>	-20	8.58
<b>Italian ryegrass</b>	95	6.89	86	5.79	<b>111</b>	<b>4.31</b>	29	-25.62
<b>BFT + Black Medick</b>	199	3.74	274	5.47	<b>379</b>	<b>4.49</b>	38	-18.00
<b>Meadow fescue</b>	79	1.80	100	2.84	<b>108</b>	<b>4.26</b>	8	49.70
<b>Red Fescue</b>	45	0.99	68	2.42	<b>89</b>	<b>6.35</b>	31	162.33
<b>Sainfoin</b>	31	1.61	65	2.75	<b>139</b>	<b>8.38</b>	114	205.00
<b>Tall Fescue</b>	31	0.57	52	1.28	<b>46</b>	<b>0.93</b>	-12	-27.21
<b>Sheep's fescue</b>	6	0.02	35	1.29	<b>63</b>	<b>1.87</b>	80	44.74
<b>Totals:</b>	<b>2,391</b>	<b>111</b>	<b>2,643</b>	<b>102</b>	<b>2,653</b>	<b>115</b>	<b>301</b>	<b>548</b>

**Graph 7: Non-organic grass seed authorisations (selected crops)**



## Forage / Fodder Crops

The total of authorisations for the species in Table 7 was 5,480 in 2022, rising from 5,076 in 2021 and 3,972 in 2020 (the 2019 figure was 5,356). The tonnage shows the same pattern: 170 tonnes (2022), 143 tonnes (2021), 106 tonnes (2020) and 144 tonnes (2019).

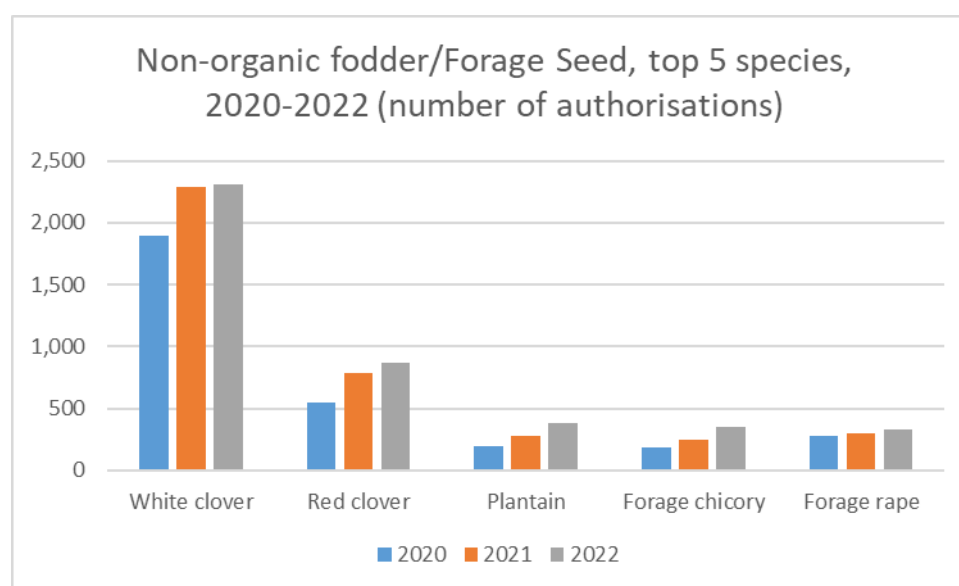
**Table 7: Comparison of non-organic forage/fodder seed (major crops) : 2020–2022**

	2020			2021			2022			% Change 2020-21	
	auths	tonnes	seeds	auths	tonnes	seeds	auths	tonnes	seeds	% auths	% tonnes
White clover	1,899	23.46	-	2,293	36.82	-	2,304	37.46	-	0.5	1.7
Red clover	551	20.56	-	780	28.83	-	873	35.67	-	11.9	23.7
Forage rape	272	11.09	22,678,000	294	14.58	21,000,000	325	17.70	-	10.5	21.4
Vetch	58	10.48	-	118	18.85	-	146	24.08	-	23.7	27.7
Flax	39	1.40	-	68	3.17	550	71	4.02	120	4.4	27.1
Stubble turnip	234	11.70	-	204	12.75	-	157	6.97	2,000	-23.0	-45.3
Fodder kale	139	2.20	-	158	4.15	-	156	3.78	100,000	-1.3	-8.9
Alfalfa	47	2.93	-	72	11.07	-	83	7.05	-	15.3	-36.3
Alsike clover	107	0.73	-	169	1.55	-	224	2.19	-	32.5	41.9
White mustard	42	1.68	-	49	1.27	-	67	2.39	-	36.7	88.6
Fodder radish	70	1.67	700	133	3.07	15,200,000	102	1.51	14,000,000	-23.3	-50.8
Forage chicory	187	1.63	-	241	2.25	-	347	5.49	-	44.0	144.4
Plantain	191	1.40	-	279	1.63	-	383	2.78	100	37.3	71.0
Crimson clover	57	0.98	-	91	1.03	-	123	2.15	-	35.2	108.7
Balansa clover	6	0.28	-	53	0.44	-	19	0.37	-	-64.2	-16.4
Persian clover	21	0.27	-	22	0.42	-	35	0.37	-	59.1	-12.3
Fodder beet	48	0.17	30,003,120	49	0.10	28,072,460	50	0.86	39,697,000	2.0	789.1
Lupin*	4	13.18	-	3	0.68	-	15	14.76	-	400.0	2,086.4
<b>Totals:</b>	<b>3,972</b>	<b>106</b>	<b>52,681,820</b>	<b>5,076</b>	<b>143</b>	<b>64,273,010</b>	<b>5,480</b>	<b>170</b>	<b>53,799,220</b>	<b>601</b>	<b>3,262</b>

\*

Lupins are both a forage and a combinable crop and could equally well be placed with Arable crops in Table 2.

**Graph 8: Non-organic forage/fodder seed 2020-2022**



## The UK database: [www.organicxseeds.co.uk](http://www.organicxseeds.co.uk)

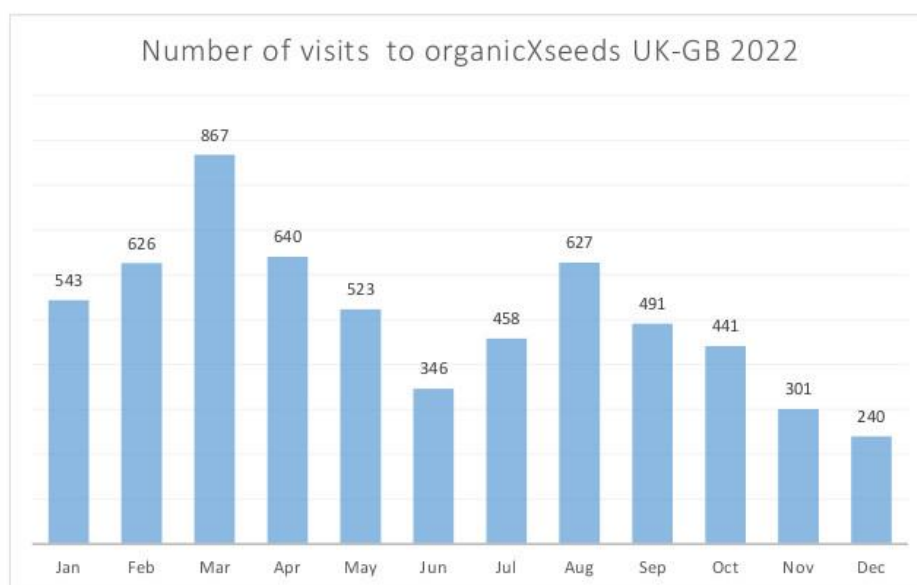
This database is a requirement of EU Regulation (EC) No. 834/2007 and 889/2008 which regulates the use of seeds and seed potatoes in organic farming.

There are currently 31 seed companies registered in the database who are able to supply organic seed and/or organic seed potatoes to organic farmers and growers in the UK. Seed suppliers can register species of organic seed and/or organic seed potatoes by variety via a login and password. They are regulated by a signed contract with the Soil Association requiring them to update their seed listings in accordance with current availability.

Organic producers are legally obliged to use organic seed that is registered in the database. UK control bodies are legally obliged to check the database for organic seed availability before issuing authorisations to use non-organic seed.

Statistics are provided annually by [FiBL](#) relating to the usage of the Organic X Seeds website (which operates across several EU member states) and are shown in Graphs 9 and 10.

**Graph 9: OXS Usage UK-GB 2022**



The share of OXS UK-GB to the total visits of organicXseeds amounts to 4,2%.

**Graph 10: OXS Usage All Countries 2022**





## Explanation of authorisation data

In accordance with Article 12 of Commission Regulation (EC) No 1452/2003 the report shall contain, for each species concerned by an authorisation according to Article 5(1), the following information:

- The scientific name of the species and the variety denomination
- The English or common name of the species and the variety denomination
- The justification for the authorisation indicated by a reference to Article 5(1)
- The total number of authorisations
- The total quantity of seed or seed potatoes involved
- The chemical treatment for phytosanitary purposes as referred to in Article 3(a) Authorisation according to Article 5(1) for seed (agricultural crop)

### Column 1

Scientific name of the species

### Column 2

English or common name of the species

### Column 3

Variety name

### Column 4

Justification / Reason for authorisation

The justification for the authorisation is indicated by a reference to Article 5(1) (a), (b), (c) or (d) (**NB:** In the UK it has been agreed by Defra to modify Article 5(1) and use the following justifications).

- (a) If no variety of the species, which the user wants to obtain is registered in the database provided for in article 6;
- (b) If no supplier is able to deliver the seed or seed potatoes before sowing or planting in situations where the user has ordered the seed or seed potatoes in reasonable time;
- (c) If the variety which the user wants to obtain is not registered in the database, and the user is able to demonstrate that none of the registered alternatives of the same species are appropriate and that the authorisation therefore is significant for his production;
- (d1) It is justified for use in research;
- (d2) To test in small-scale field trials;
- (d3) For variety conservation purposes, agreed by the competent authority of the member state;

(e) The seed is part of a grass or forage mix containing at least 70% organic seeds.

#### **Column 5**

The chemical treatment for phytosanitary purposes

**There are currently no chemical treatments allowed for phytosanitary purposes in the UK.**

*[This column is informally used for seed-for-seed production]*

#### **Column 6**

The total number of authorisations for each variety

#### **Column 7**

The total number of authorisations for each species

#### **Column 8**

The total quantity of seed, plants or seed potatoes (by variety)

For each variety it is stated, how many units of seed or vegetative propagating material have been authorised. Where two or more authorisations have been granted, the amounts have been added.

#### **Column 9**

The total quantity of seed or seed potatoes (by species)

### **Seed authorisation data**

The accompanying document - "UK Non-Organic Seed Authorisation Report 2022 Data" - summarises the authorisations granted in 2022 by all of the UK organic control bodies.

There are some anomalies in the way that the data is collected by the control bodies. For example, the same variety of a particular crop may have some entries recorded by the number of seeds or plants and others by the weight of the seed. Where this has occurred the entries have been added to give a total by each unit of measurement. Although the control bodies are aware of this they often receive the request for authorisations in various units from the producer, who in turn records the information as provided by the seed company. In addition, the A-E "reason/justification" codes have been recorded as presented by the control bodies, even though it is evident that these are often assigned incorrectly.

### **Acknowledgements**

Report compiled by Martin Parkinson, Jerry Alford, John English and Adrian Steele. Data compiled by Martin Parkinson. Seed working groups chaired by Ben Raskin and Adrian Steele.