

UK Annual Non-Organic Seed Authorisation Report for 2021

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 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”)



Department
for Environment
Food & Rural Affairs



Prepared by the Soil Association on behalf of Defra
March 2022

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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 13,106 in 2020 to **16,598** in 2021. The total of authorisations fluctuates from year to year, with the high point of the last ten years being 17,101 in 2011.

Seed Potatoes

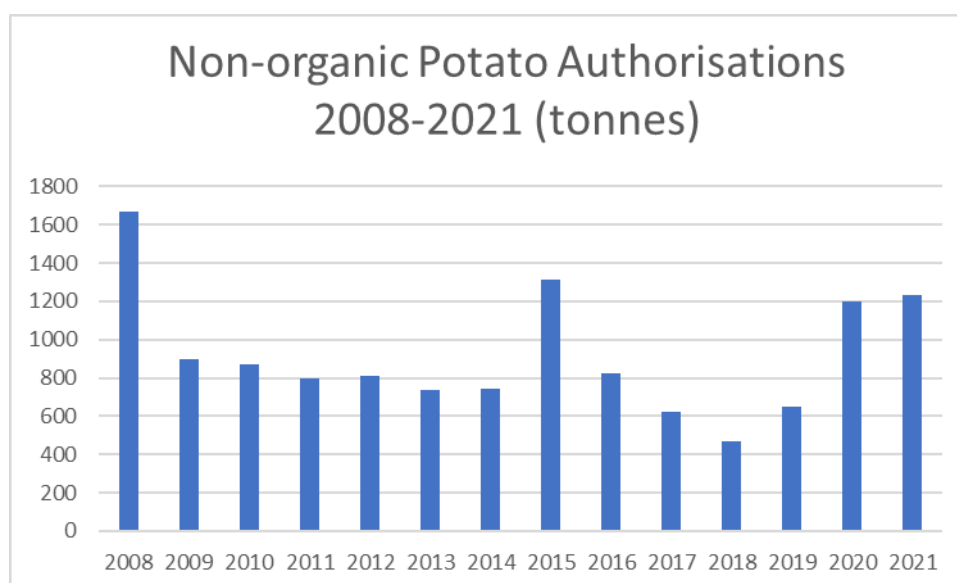
The total number of potato authorisations granted in 2021 was 115, a decrease on the previous year's figure of 136. The total volume for 2021 was 1,232 tonnes, a small increase on 2020's total of 1,200 tonnes. The longer-term fluctuations are shown in graphs 1 and 2 and the overall figures for the last three years are given in Table 1 below.

The authorisations were spread over a total of 63 varieties. Table 2 shows details of the largest 15 varieties, together with comparisons for those varieties from 2020 and 2019.

Table 1: Non-organic seed potato authorisations issued to UK organic farmers 2019-2021 (all varieties)

	2019	2020	2021
number of varieties	57	68	63
total tonnes	695	1,200	1,232
total authorisations	85	136	115

Graph 1: Non-organic seed potato authorisations, 2008-2021



Graph 2: Non-organic seed potato authorisations, 2008-2021

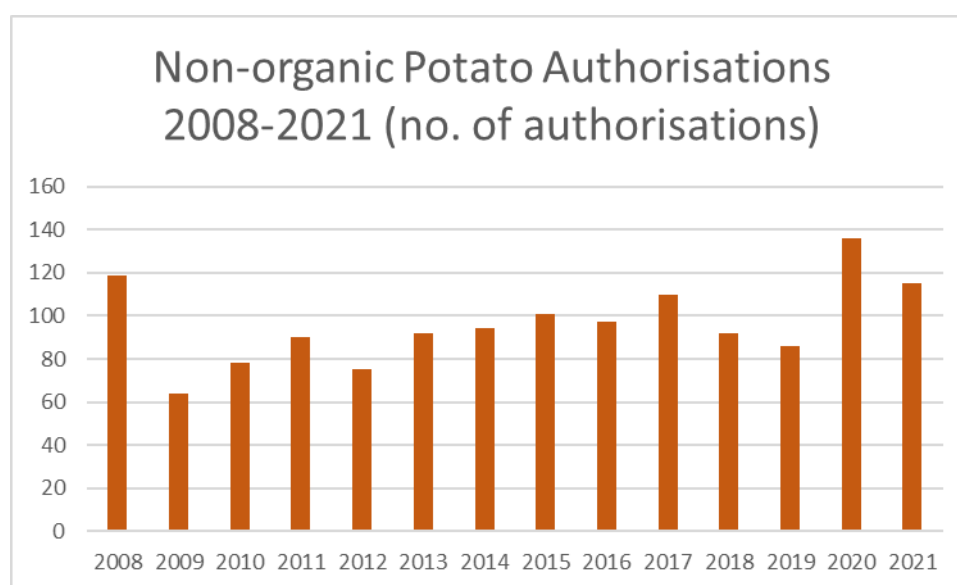


Table 2: Non-organic seed potato authorisations issued to UK organic farmers 2021: top varieties (over 15 tonnes), with comparisons for those varieties 2019-2020

Variety	2019		2020		2021	
	auths	tonnes	auths	tonnes	auths	tonnes
Valor	7	102.35	9	204.00	6	154.25
Triplo	-	-	6	294.00	3	122.50
Athlete	-	-	4	90.50	5	114.00
Lady Balfour	-	-	3	270.00	2	104.00
Jersey Royal	1	75.00	2	100.00	3	102.00
Alexia	-	-	2	242.00	1	100.00
Maris Peer	4	243.00	2	160.00	3	73.50
Acoustic	1	3.00	3	45.00	5	67.25
Rooster	1	39.00	2	97.00	1	60.00
Marfona	2	20.00	5	68.00	2	43.00
Orla	3	18.50	3	23.00	3	32.50
Kelly	1	25.00	2	52.50	2	30.00
Jester	-	-	2	109.50	1	27.50
Nicola	-	-	2	11.05	4	18.60
Charlotte	2	7.50	9	28.05	5	17.10
Maris Piper	1	0.01	-	-	2	16.00
Rudolph	2	2.50	1	3.70	2	15.00

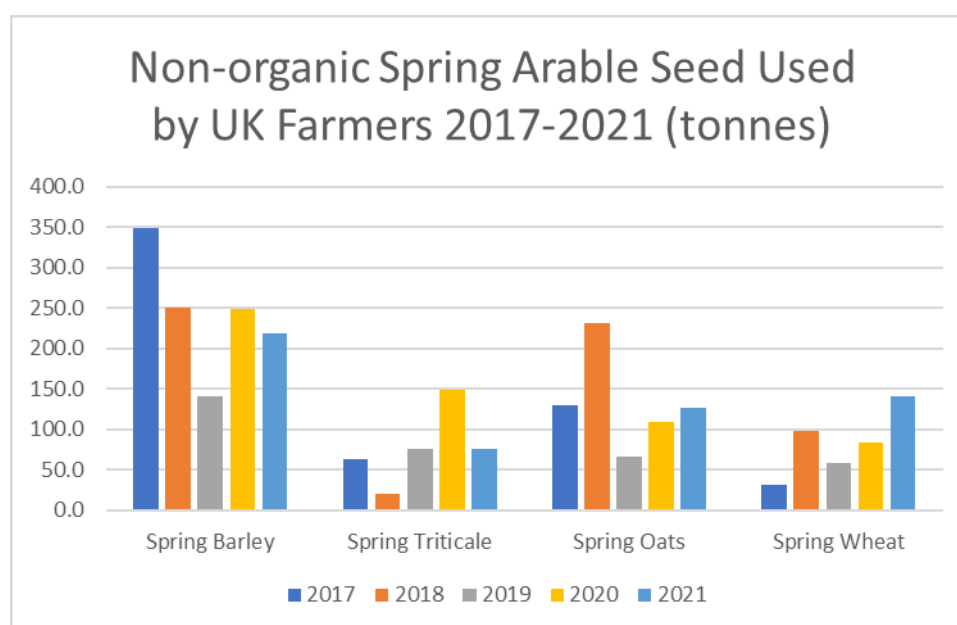
Arable and cereal crops

The total number of authorisations in this sector for 2021 was 691, up from 501 in 2020. The volume for 2021 was 1,424 tonnes as compared to 1,174 tonnes in 2020. There is proportional fluctuation between the different crops from year to year as shown in Table 3 and graphs 3-5.

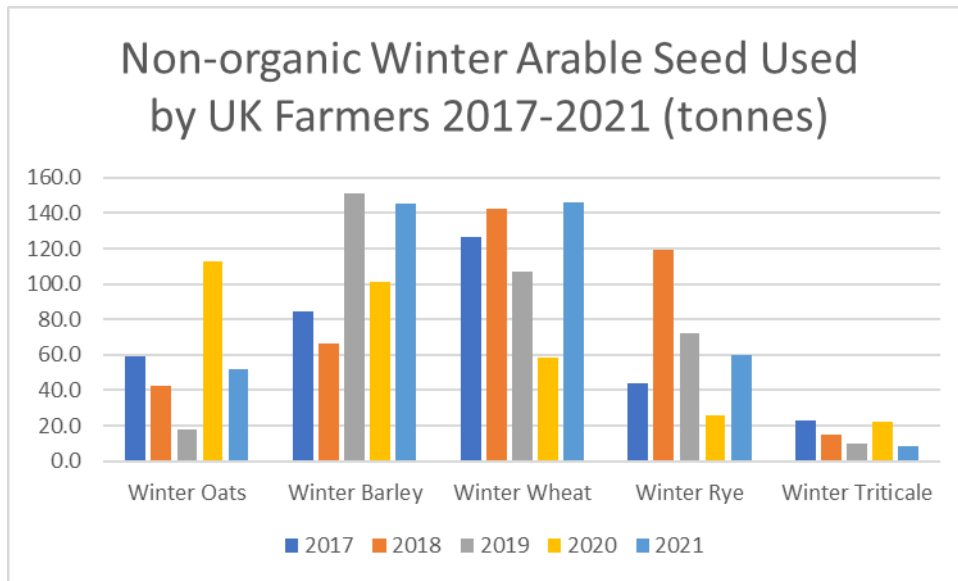
Table 3: Non-organic arable seed used by UK organic farmers: 2019 to 2021

Crop	2019		2020		2021		% change 2020-21	
	auths	tonnes	auths	tonnes	auths	tonnes	auths	tonnes
Field Pea	260	397.2	167	168.9	215	281.4	29	67
Spring Barley	81	141.1	57	248.3	55	218.4	-4	-12
Field Bean	63	185.8	21	72.9	49	160.7	133	120
Winter Wheat	90	107.0	44	58.5	137	146.1	211	150
Winter Barley	34	151.0	33	101.5	35	145.5	6	43
Spring Wheat	20	59.1	19	84.3	19	141.3	0	68
Spring Oats	42	65.7	30	109.0	32	127.3	7	17
Spring Triticale	56	75.8	56	149.0	66	76.4	18	-49
Winter Rye	34	72.5	38	25.7	52	60.1	37	134
Winter Oats	17	17.6	22	113.0	16	51.8	-27	-54
Winter Triticale	9	9.6	9	22.3	7	8.5	-22	-62
Spelt	3	3.2	5	20.8	3	5.7	-40	-72
Emmer	-	-	-	-	5	0.9	-	-

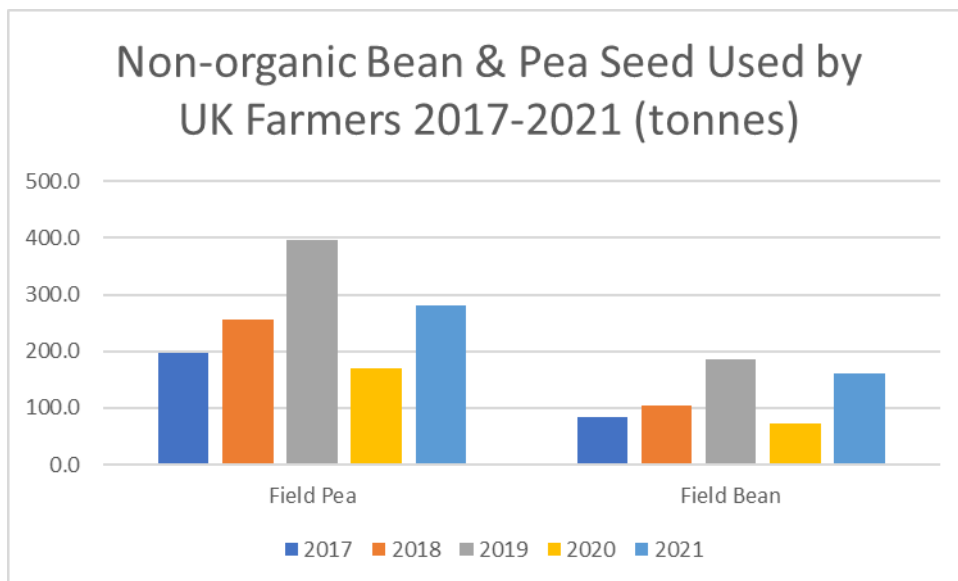
Graph 3: Comparison of non-organic spring arable seed authorisations



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



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



Horticulture

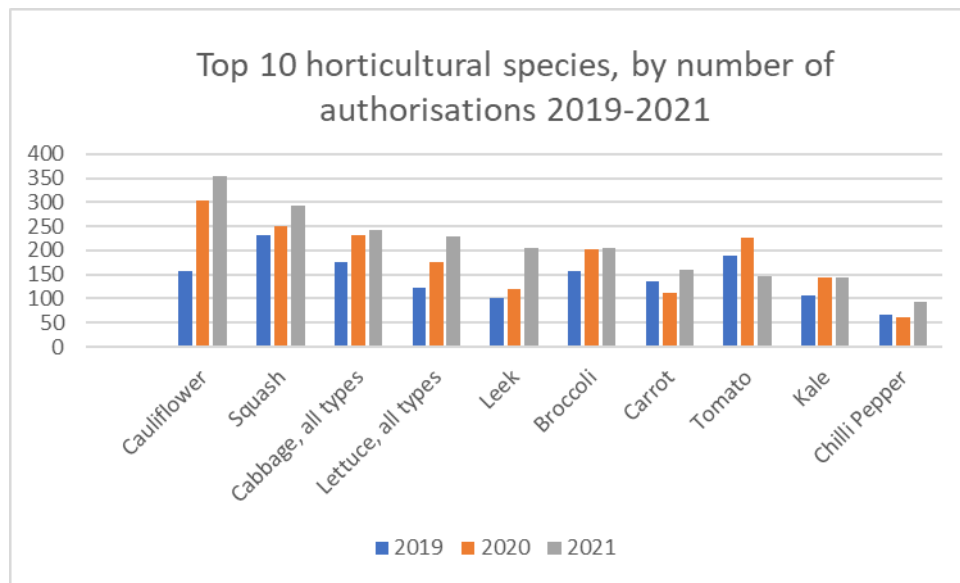
Table 4 and Graph 6 show comparisons for some of the major vegetable crops. The total of authorisations for the species in Table 4 was 2,708, rising from 2,452 in 2020 and 2,039 in 2019.

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 the top 20 horticultural crop species in 2021 (by number of authorisations) compared with the same crops 2019-2021

Crop	2019			2020			2021		
	auths	kg	seeds	auths	kg	seeds	auths	kg	seeds
Asia Greens	63	57.66	26,937,760	47	4.22	37,373,317	51	98.05	43,960,318
Beetroot	71	14.23	62,747,370	72	37.15	35,860,583	92	92.45	91,068,146
Broccoli	156	188.04	16,546,197	202	0.04	30,918,051	205	12.62	40,186,455
Brussels Sprouts	53	25.00	462,124	61	0.06	273,078	56	-	358,517
Cabbage, all types	175	1.38	5,620,822	231	41.72	10,911,201	242	6.20	10,769,825
Carrot	137	15.33	813,994,656	112	0.02	1,086,750,802	159	0.13	1,080,042,260
Cauliflower	158	5.00	4,582,417	304	0.05	8,763,071	353	7.57	10,759,534
Chard	46	14.43	9,417,065	60	13.81	17,640,940	63	8.40	19,541,120
Chilli Pepper	67	-	5,218	61	0.05	7,279	94	0.01	22,459
Courgette	52	-	810,212	79	35.07	613,568	88	66.46	548,943
Kale	106	177.88	1,529,284	144	126.71	5,051,848	143	85.61	2,878,216
Leek	101	0.65	23,121,175	121	0.25	19,495,256	206	120.02	27,012,598
Lettuce, all types	122	7.71	24,447,708	176	0.23	72,333,222	230	20.07	124,641,024
Pak Choi	48	10.24	3,529,663	55	0.74	373,904	54	1.12	5,269,978
Pea	39	800.50	1,390,940	30	4,908.90	1,408,210	25	26.77	404,950
Quinoa	85	1,114.23	200	63	1,643.96	-	66	1,935.15	200
Spinach	70	0.95	825,867,110	67	0.02	947,630,500	68	35.12	1,628,953,200
Squash	232	116.65	634,091	249	0.79	828,685	292	2.91	1,257,606
Sweetcorn	68	2.10	2,835,383	91	6.10	3,747,742	74	-	1,853,067
Tomato	190	0.89	365,159	227	0.04	376,786	147	0.01	402,533

Graph 6: Non-organic vegetable seed authorisations comparison (selected crops)



Fruit

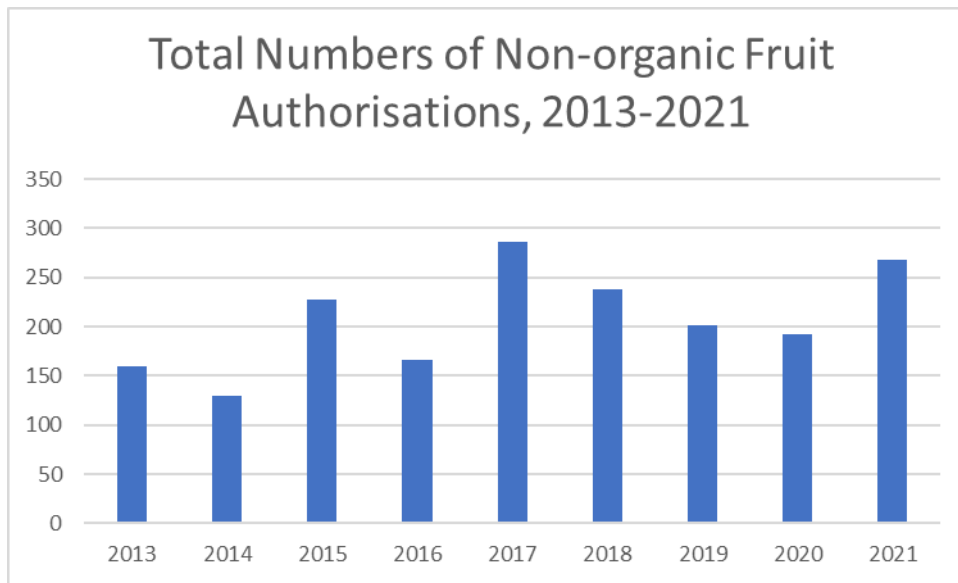
Table 5 shows comparisons for the main fruit crops. The total of authorisations for the species in Table 5 was 237, rising from 192 in 2020 and 198 in 2019. Graph 7 shows the long-term variation in authorisations.

Table 5: Summary of non-organic fruit authorisations – selected crops

Crop	2019		2020		2021	
	Auths	Quantity (plants)	Auths	Quantity (plants)	Auths	Quantity (plants)
Apple	95	6,039	75	8,409	95	2,552
Apricots	-	-	-	-	-	-
Blackberry	5	71	-	-	1	5
Blackcurrant	7	30,012	10	48,655	4	22
Blueberry	7	20	8	58,244	10	17
Cherry	3	76	7	553	17	13,134
Chuckleberry	1	5,000	1	8,000	-	-
Crabapple	12	245	6	308	14	643
Gooseberry	6	1,094	7	24,108	10	80
Grape	2	850	11	16,450	4	925
Melon	-	-	-	-	16	3,670*
Mulberry	8	38	-	-	2	9
Peach	-	-	2	10	1	1
Pear	17	48	14	754	13	4,311
Plum	3	350	22	403	16	5,398
Raspberry	8	666	15	2,456	12	868
Red Currant	5	10,058	3	16,003	6	24
Strawberry	17	9,210	8	5,600	13	204
Tayberry	-	-	1	10	2	6
White Currant	2	5,005	2	8,001	1	1

* seeds

Graph 7: Comparison of the non-organic fruit authorisations issued to UK organic farmers and growers between 2013 and 2021 (all fruit crops)



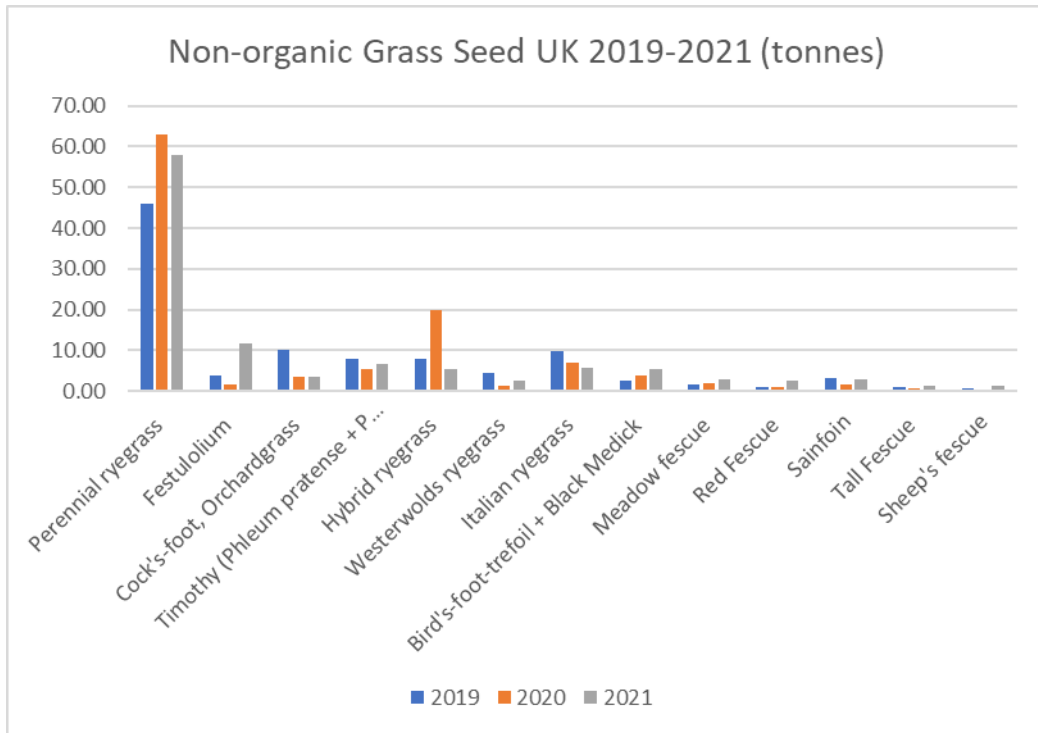
Grass Seed

Table 6 shows comparisons for the main grass type crops. The total of authorisations for the species in Table 6 was 2,643, rising from 2,391 in 2020 which was a fall from 2,587 in 2019. The total volume for 2021 was 102 tonnes. A fall from 111 tonnes in 2020 and 100 tonnes in 2019.

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

Name of Crop Species	2019		2020		2021		% Change 2019-20	
	Auths	Amount (tonnes)	Auths	Amount (tonnes)	Auths	Amount (tonnes)	Auths	Amount (tonnes)
Perennial ryegrass	1,196	45.99	1,353	62.90	1,305	57.99	-4	-8
Festulolium	71	3.86	36	1.72	72	3.96	100	131
Cock's-foot	202	9.98	117	3.63	107	3.61	-9	-1
Timothy	393	8.00	254	5.43	309	6.65	22	22
Hybrid ryegrass	150	7.87	129	19.89	129	5.32	0	-73
Westerwolds ryegrass	42	4.50	16	1.38	41	2.59	156	88
Italian ryegrass	106	9.68	95	6.89	86	5.79	-9	-16
Bird's-foot-trefoil + Black Medick	165	2.68	199	3.74	274	5.47	38	46
Meadow fescue	68	1.72	79	1.80	100	2.84	27	58
Red Fescue	55	1.05	45	0.99	68	2.42	51	144
Sainfoin	73	3.26	31	1.61	65	2.75	110	70
Tall Fescue	39	1.08	31	0.57	52	1.28	68	122
Sheep's fescue	27	0.54	6	0.02	35	1.29	483	5,791

Graph 8: Tonnage of non-organic grass seed authorisations (selected crops)



Forage / Fodder Crops

Table 7 shows comparisons for the main crops. The total of authorisations for the species in Table 7 was 5,076 rising from 3,972 in 2020 which was a fall from 5,356 in 2019. The tonnage shows the same pattern: 143 tonnes (2021), 106 tonnes (2020) and 144 tonnes (2019).

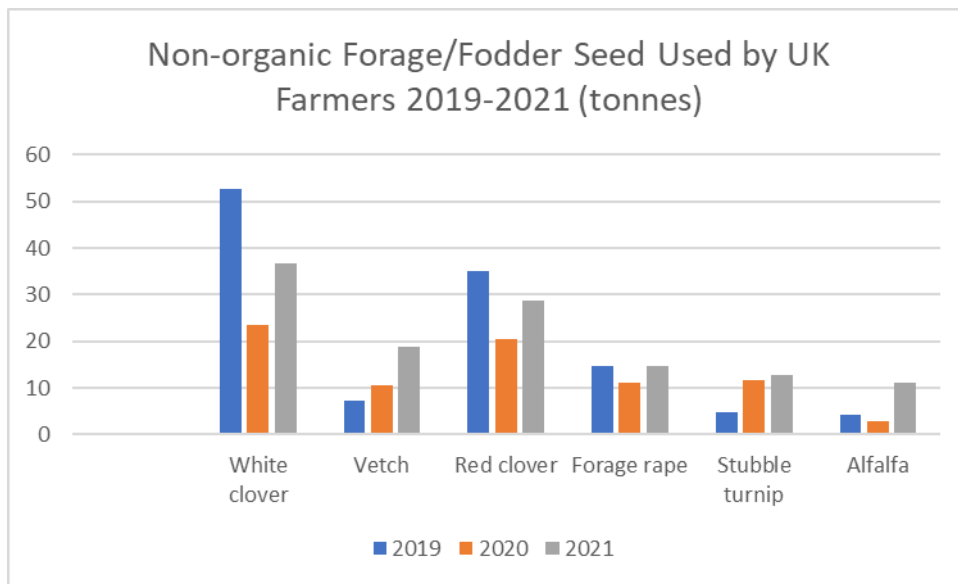
Table 7: Summary comparison of authorisations issued for non-organic forage/fodder seed (major crops) : 2020–2021, by volume

Crop	2019		2020		2021		% Change 2020-21	
	Auths	Amount (tonnes)	Auths	Amount (tonnes)	Auths	Amount (tonnes)	Auths	Amount
White clover	2,687	52.76	1,899	23.46	2,293	36.82	21	57
Red clover	872	35.15	551	20.56	780	28.83	42	40
Forage rape	336	14.64	272	11.09	294	14.58	8	31
Vetch	53	7.36	58	10.48	118	18.85	103	80
Flax	64	5.22	39	1.40	68	3.17	74	126
Stubble turnip	155	4.92	234	11.70	204	12.75	-13	9
Fodder kale	180	4.71	139	2.20	158	4.15	14	88
Alfalfa	54	4.33	47	2.93	72	11.07	53	277
Alsike clover	139	2.71	107	0.73	169	1.55	58	111
White mustard	65	2.68	42	1.68	49	1.27	17	-25
Fodder radish	115	2.14	70	1.67	133	3.07	90	84
Forage chicory	236	1.90	187	1.63	241	2.25	29	38
Plantain	236	1.78	191	1.40	279	1.63	46	16
Crimson clover	72	1.73	57	0.98	91	1.03	60	5
Balansa clover	5	0.29	6	0.28	53	0.44	783	57
Persian clover	38	0.40	21	0.27	22	0.42	5	56
Fodder beet	45	0.05	48	0.17	49	0.10	2	-43
Lupin	4	1.35	4	13.18	3	0.68	-25	-95

*

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

Graph 9: Volumes of non-organic forage/fodder seed 2018-2020



The UK database: 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 32 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 provided by FiBL relating to the Organic X Seeds website (which operates across several EU member states) can be viewed below:



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 2018 Data" - summarises the authorisations granted in 2018 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

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