Republic of Ireland Annual Non-Organic Seed Authorisation Report for 2023

Authorisations to use seed and seed potatoes and vegetative propagating material not produced by the organic production method in organic farming

According to EU Regulation (EU) 2018/848, each member state should ensure that a database, in which seed, seed potatoes and vegetative propagating material produced by organic production methods, and respecting the general criteria for production of seed and vegetative propagating material can be registered and made available to users.





Prepared by the Soil Association
On behalf of the Department of Agriculture, Food and the Marine

March 2024

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Introduction

This is the eighth report produced by the Soil Association for the Department of Agriculture, Food and Marine, setting out the situation with regards to authorisations to use non-organic seeds issued by Irish organic control bodies to organic agricultural and horticultural operators in Ireland during the calendar year.

Purpose of the report

The non-organic annual seed authorisation report provides information on the quantities and varieties of non-organic seed used by organic farmers and growers in Ireland. This information is intended for use by the seed industry, producers, policy makers and organic control bodies to increase use of organic seed and comply with EU 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.

As a requirement of EU Regulation (EU) 2018/848, every Member State must produce an annual report publishing all authorisations (sometimes referred to as derogations) to use non-organic seed, non-organic seed potatoes and non-organic vegetative propagating material. For Ireland, the report is compiled by the Soil Association on behalf of the Department for Agriculture, Food and the Marine. It will then be sent to the European Commission and other Member States, and also made publicly available via the organic seed database (https://ie.organicxseeds.com/).

Context

There has been a marked increase in the land total land area devoted to organic production in 2023.

Figures provided by DAFM indicate that in 2023 the total organic land area (both in conversion and fully converted) was aapproximately 175,000 ha - 4% of the available agricultural area. In contrast, the total area in 2022 was 110,000 ha. The increase almost certainly arose because of the Organic Farming scheme, in which there were 4,030 participants

The 2023 figure for organic operators (i.e both producers and processors) was 4,433.

Summary of authorisations

The total number of non-organic seed, seed potato, and vegetative propagating material authorisations issued to organic farmers and growers in the Republic of Ireland during 2023 was **2,929**, a small increase on the 2022 figure of 2,757. Previous years were: 2,181 (2021), 2,668 (2020), 2,020 (2019), 2,268 (2018), 2,063 (2017), and 2,096 (2016).

The remarks from the 2022 report still apply: varietal choice of seed is an ongoing concern; complying with the European Union's desire to reach 100% organic seed without compromising varietal choice, is likely to be very difficult. Increased levels of non-organic seed use are undesirable within the organic sector as it challenges a key intention of the new EU Organic regulation, which came into force 1st January 2022. It also risks creating two tiers of seed costs for farmers, potentially undermining public trust, despite the practical reasons that may be behind these differences. Continued progress in organic seed production and usage is important to allow the organic sector to comply with regulatory requirements, protect public integrity and trust in organic food, and support continued innovation in organic seed production.

This report is analysed in five main sectors: seed potatoes, arable/cereal crops, horticulture, fruit, and grass/forage/fodder crops.

Seed Potatoes

In total 53 authorisations were issued for non-organic seed potatoes in 2023; a decrease of 16 (-23%) in the number of derogations as well as a large decrease in total weight of 96.88 tonnes (-85%). The overall figures for the last five years are shown in Table 1 below.

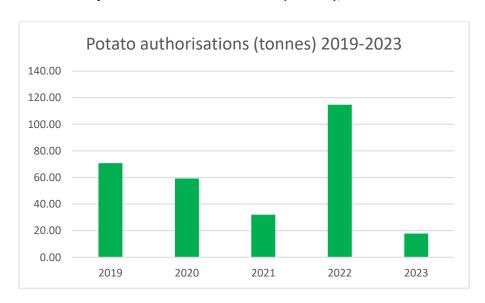
Table 1: Non-organic seed potato usage 2019-2023 – broad changes

	2019	2020	2021	2022	2023
No of varieties	18	15	16	25	21
No of auths	37	27	42	69	53
Total tonnes	70.84	59.27	32.07	114.7	17.82

If one looks for long-term trends in table 1, the 2022 tonnage is so strikingly anomalous that it is worth repeating the comments from the 2022 report: "The marked increase in tonnage compared with 2021 is due principally to additional authorisations of the *Orla* variety, where two operators increased their certified land area in order to double their production and organic *Orla* was not available from suppliers in the quantities required. Also Brexit has caused a number of issues with the supply so more farmers are having to source non-organic seed"

Bearing that in mind, the decrease in tonnage for 2023 is not so dramatic as it at first appears, as shown in graph 1, where it seems to be part of a clear trend.

Graph 1: Potato authorisations (tonnes), 2019-2023



There has also been a substantial drop in the number of authorisations – possibly a positive sign. In 2022 the largest volume derogated for was 103,720 kg of *Orla* whereas in 2023 the largest volume was 5,000 kg of Alanis. In 2023 802 kg of *Orla* were derogated for – the lowest amount in 3 years.

Table 2 gives fuller details of the varieties authorised in 2023, compared with how these varieties fared in previous years. After *Alanis*, the varieties with the highest kg quantities were *Acoustic*, *British Queens*, *Solist* and *Premiere*. The remainder of table 2 shows a varying picture from year to year; in the main these are small scale plantings of a range of different varieties.

Table 2: non-organic seed potato varieties used in 2023, with amounts for these varieties compared with 2021 and 2022

	2021		20)22	2023		
•	auths	kg	auths	kg	auths	kg	
Alanis	-	-	2	300	2	5,000	
Acoustic	-	-	-	-	1	4,000	
British Queens	4	620	8	1,971	7	2,325	
Solist	4	58	5	195	7	1,070	
Premiere	2	23	10	480	9	982	
Charlotte	3	550	5	1,075	3	825	
Purple Rain	-	-	3	111	5	737	
Orla	1	25,000	8	103,720	3	702*	
Prada	-	-	1	25	1	500	
Setanta	1	400	-	-	1	500	
Golden Wonder	-	-	1	100	2	250	
Lily Rose	-	-	-	-	3	212	
Rooster	2	120	3	122	1	200	
Records	1	1,000	1	2	1	200	
Agostino	-	-	-	-	1	200	
Home Guard	1	25	3	52	1	25	
Red Duke	-	-	-	-	1	25	
Sarpo Axona	-	-	1	50	1	20	
Blue Danube	-	-			1	20	
Sarpo Una	-	-	-	-	1	20	

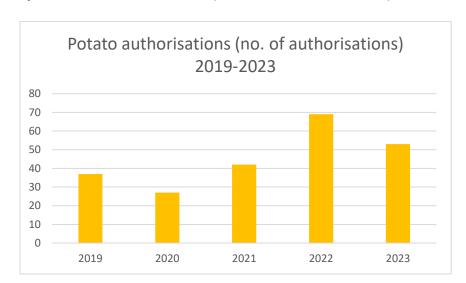
totals: 52 17,813

[In addition, there was one authorisation of 8 kg, given as 'Nicola, Solist, Charlotte', adding one authorisation and one variety to give the totals in table 1]

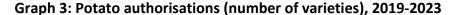
Authorisations over the last 5 years are shown in graph 2 and number of varieties in graph 3.

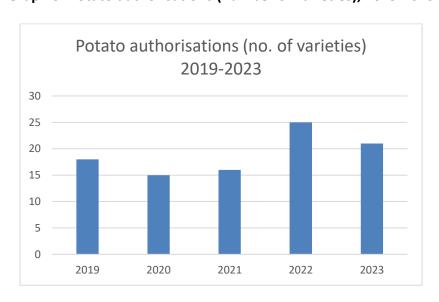
Alanis is a new variety to the market and has excellent tolerance to *phythophthora* and drought. It has therefore been highlighted as an excellent variety choice for organic growers. Hence the reason for the dramatic increase in the amount of seed derogated in 2023.

Due to complexities in the supply chain and with limited information available, is difficult to fully understand the changes; we suggest that the situation could be closely monitored by the Ireland certification bodies, who should hold discussions with their licenses in order to establish if there are ongoing issues with organic seed potato supply in 2024.



Graph 2: Potato authorisations (number of authorisations), 2019-2023





Arable and cereal crops

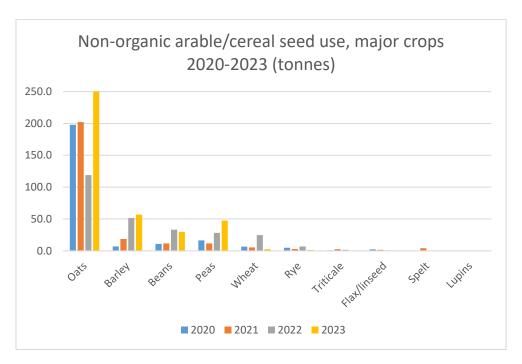
There was a further increase in the number of authorisations for non-organic seed in 2023 compared with 2022, but this doesn't reflect the whole picture because there was a disproportionate increase in oat authorisations and volumes. The total number of authorisations (all crops) increased from 272 to 318 and the total volume rose from 268 tonnes to 390 tonnes, but if we subtract oats from the total, the authorisations and volumes were fairly similar to the previous year. (Authorisations excluding oats: 178 for 2023, 188 for 2022. Tonnage excluding oats: 139 for 2023, 148 for 2022).

As the most popular cereal crop, oats account for 44% of the authorisations but 64% of total tonnage. In 2023 there were over 250 tonnes of non-organic oat authorisations applied for from 140 farms (assuming one authorisation per farm) compared with 119 tonnes from 84 farms in 2022. These were all spring oats, which perhaps is partly linked to a large reduction in wheat volumes, down from nearly 25 tonnes in 2022 to 2.6 tonnes. Other spring crops also showed increases in both authorisations and volumes which likely reflects the wet autumn and lack of opportunity to plant winter crops together with an unexpected demand for spring seed crops. Peas showed an increase to nearly 48 tonnes from 28 tonnes and a similar increase in numbers of authorisations. Beans dropped marginally on the 2022 level but were still well above 2021 levels

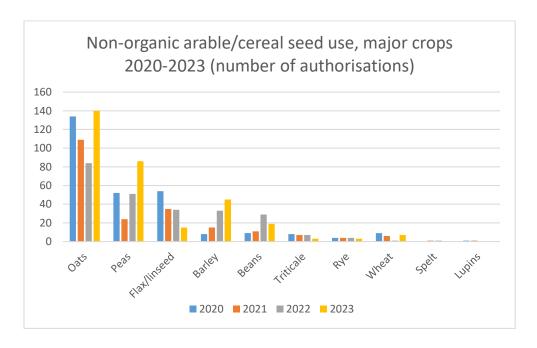
Table 3: Non-organic arable/cereal 2021-2023, comparison of selected species

	2	021	2	022	2023		
	auths	tonnes	auths	tonnes	auths	tonnes	
Oats	109	202.03	84	119.20	140	251.29	
Barley	15	18.59	33	51.58	45	56.99	
Peas	24	11.60	51	28.35	86	47.59	
Beans	11	11.70	29	33.15	19	29.75	
Wheat	6	5.45	25	24.85	7	2.62	
Rye	4	2.95	4	7.00	3	1.38	
Flax/linseed	39	1.71	35	0.88	15	0.49	
Triticale	7	2.60	7	1.52	3	0.32	
Wheat/Barley/Pea	-	-	1	1.10	-	-	
Spelt	1	4.00	1	0.001	-	-	
Lupins	1	0.45	-	-	-	-	
Wheat > Durum	-	-	-	-	-	-	
Wheat > Einkorn	-	-	1	0.0002	-	-	
Wheat > Emmer	-	-	1	0.0003	-	-	
Totals:	217	261.08	272	267.63	318	390	





Graph 5: Non-organic arable /cereal seed – major crops by number of authorisations, 2020-2023



Horticulture

The horticultural sector covers a diverse range of crops and scales of production and therefore to dispel some of the complexities and anomalies within the reporting only the major core lines will be the primary focus. Table 5 is a simplified summary for the major crop lines, including those which have more significant numbers of authorisations. For consistency, some lines which have relatively few authorisations have been retained in the table if they were reported on in the previous year.

Vegetable seed is sold by kg and by seed count and therefore most of the crop lines in Table 5 include authorisations in both formats. Single Seed Weights can vary across different varieties within a crop heading and so for accuracy, we have retained the original units of measurement from the authorisation reports and we have not attempted to convert them into a combined total in kg or seed count.

Total number of authorisations

The number of individual authorisations (for the crops in table 5) dropped from 357 in 2022 to 271 in 2023, a 24% decrease. This decrease brings the number of authorisations broadly in line with those seen in 2022 except for squashes which has reduced by 17%.

Frequency of authorisations by crop

The 2023 crop lines with the largest frequency of single authorisations are outlined in table 4 below. This demonstrates that the majority of seed authorised is across very few specific varieties and this could be a result of limited organic seed availability of those varieties with similar characteristics or a single step change in crop from larger producers.

Table 4: Horticultural crops with largest number of single-authorisation varieties 2023

	No. of authorisations	Total No. of varieties	No. of varieties which account for majority of seed authorised
Lettuce	37	23	7
Kale	29	13	2
Tomato	27	16	1
Beetroot	23	7	1
Carrots	21	10	3

In some crops groups there is limited diversity of organically-available varieties, which in turn means growers will seek authorisations for particular crops, dependent on market, harvest period, soil type and other characteristics.

Quantities of seed

Due to the complexities of the sector each crop would have to be reviewed individually to draw meaningful comparisons. For example, the number of authorisations for carrots has decreased by 1 from 2022. However, the amount of seed being authorised has increased by 24% and this is across only 3 dominant varieties.

Table 5: Non-organic vegetable seed authorisations in Ireland, 2021-2023: selected crops

		2021			2022			2023	
	auths	seeds	kg	auths	seeds	kg	auths	seeds	kg
Asia Greens	7	-	6.600	12	-	10.350	15	-	2.97
Beetroot	17	110,613	3.45	37	2,870,300	6.036	23	1,236,000	4.50
Broad Bean	5	100	13.000	2	-	5.200	5	100	39.00
Broccoli	14	967,400	0.006	28	581,710	1.400	17	366,520	-
Brussels Sprout	4	10,045	0.006	7	12,620	-	4	10,610	-
Cabbage, all	8	38,910	-	22	49,400	0.005	5	6,000	0.01
Carrot	18	41,146,000	0.100	22	59,875,540	0.671	21	78,853,000	-
Cauliflower	10	42,500	-	14	15,150	0.016	13	35,000	-
Celeriac	1	20,000	-	1	150	-	-	-	-
Celery	-	-	-	12	74,950	0.005	3	1,100	-
Courgette	1	1,000	-	14	1,241	0.082	10	559	0.01
Cucumber	2	15	0.004	7	383	-	3	60	0.0025
French Bean	5	400	0.500	2	_	1.100	5	-	3.08
Kale	25	133,280	6.700	22	146,495	1.592	29	145,100	2.79
Kohl Rabi	2	500	-	-	-	-	1	-	0.00
Lettuce	33	4,114,128	0.020	58	2,218,220	1.146	37	158,000	0.93
Onion	6	12,200	20.454	12	30,670	69.507	14	500	125.26
Pak Choi	11	22,500	0.264	3	2,530	0.250	-	-	-
Parsnip	12	1,246,000	0.175	16	2,065,500	0.020	15	1,402,200	0.04
Pea	4	600	1.000	4	-	2.530	4	500	3.04
Pepper, Chilli	2	70	-	6	178	-	6	60	-
Pepper, Sweet	2	16	-	-	-	-	-	-	-
Runner Bean	-	-	-	1	5	-	4	-	0.14
Squash	26	5,930	-	23	1,828	0.014	10	5,735	0.10
Tomato	20	1,074	-	32	1,178	0.14	27	1,411	

Totals: 235 357 271

Fruit

Due to limited size of the market and the diverse crop and variety sector it can be very difficult to draw conclusions to what might appear to be significant changes year-on-year. The most significant change for 2023 as shown in Table 6 is the request of 100 authorisations (a doubling from 2022) for apples - but the total number of trees authorised decreased by over 12,000.

Table 6 shows the primary 27 top and soft fruit species compared with 2022 and 2021. The total number of authorisations for those 27 crops was 211, compared with 171 in 2022 and 102 in 2021 which suggests an upward trend in top and soft fruit plantings overall. There are few suppliers of organic fruit trees and plants and supply is limited, so we would expect to see frequent authorisations of non-organic stock.

Table 6: Non-organic fruit authorisations in Ireland, selected crops, 2020-2022

		2021			2022			2023	
		plants	_	_	plants	_		plants	
	auths	etc	other	auths	etc	other	auths	etc	other
Apple	18	206	-	50	12,628	-	100	191	
Apricot	-	-	-	-	-	-	2	2	
Bilberry	1	25	-	-	-	-	-	-	
Blackberry	2	15	-	3	60	-	2	35	
Blackcurrant	14	164	-	4	16	-	3	11	
Blueberry	3	2,070	-	5	60	-	11	30	
Cherry	1	730	-	12	818	-	6	6	
Elderberry	1	5	-	-	-	-	-	-	
Fig	2	2	-	2	2	-	-	-	
Gooseberry	5	70	-	5	41	-	8	56	
Grape	-	-	-	-	-	-	6	6	
Honeyberry	-	-	-	-	-	-	3	7	
Jostaberry	-	-	-	2	12	-	1	2	
Magnolia Berry	-	-	-	1	-	20 sds	-	-	
Medlar	-	-	-	2	10	-	2	36	
Mulberry	-	-	-	4	20	-	-	-	
Peach	2	2	-	4	20	-	5	5	
Pear	5	21	-	6	285	-	13	24	
Physalis	-	-	-	1	-	100 sds	-	-	
Plum	4	8	-	16	320	-	25	35	
Quince	-	-	-	3	7	-	-	-	
Raspberry	12	979	-	18	805	-	12	488	
Redcurrant/Whitecurrant	4	35	-	7	62	-	2	2	
Rhubarb	9	1,420	-	8	277	-	-	-	
Sea Buckthorn	-	-	-	1	1	-	-	-	
Strawberry	17	4,854	-	16	2,870	-	10	343	0.03 kg
Tayberry	2	17	-	1	10	-	-	-	
totals:	102			171			211		

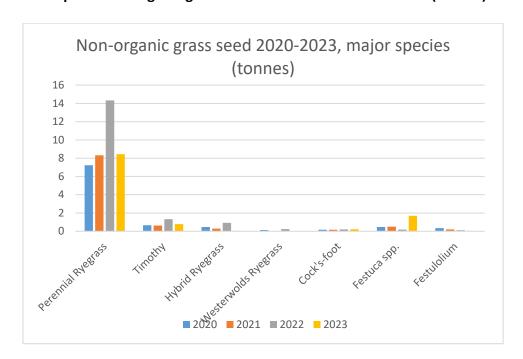
Grass, forage and fodder crops

Grass

There was a similar number of authorisations and tonnages of grass seed in both 2022 and 2023, with Perennial Ryegrass seed remaining the main grass seed. There were reduced authorisations for hybrid ryegrass and Westerwolds ryegrass which are shorter term crops and small increases in meadow grass species (but all of these are from low bases).

Table 7: Summary of non-organic grass seed authorisations in Ireland, 2021-2023

	20	021	20	022	20)23
	auths	tonnes	auths	tonnes	auths	tonnes
Perennial Ryegrass	214	8.31	347	14.33	303	8.43
Fescue (Festuca spp)	29	0.50	8	0.19	16	1.69
Timothy (Phleum spp.)	47	0.86	102	1.34	108	0.78
Cock's-foot (Dactylis)	18	0.18	13	0.21	13	0.21
Meadowgrass	89	0.63	32	0.38	25	0.20
Italian Ryegrass	-	-	-	-	1	0.10
Hybrid Ryegrass	7	0.30	17	0.92	3	0.04
Festulolium	14	0.20	4	0.12	4	0.04
Tall Oatgrass	26	0.03	13	0.01	6	0.04
Bentgrass	4	0.004	1	0.0002	3	0.0032
Meadow Foxtail	16	0.03	1	0.01	-	-
Westerwolds ryegrass	-	-	1	0.24	-	-
Sainfoin	1	0.11	5	0.08	-	-
Totals:	465	11	544	18	482	12



Graph 6: Non-organic grass seed authorisations 2020-2023 (tonnes)

Fodder and forage

The quantity of fodder crops increased significantly in both authorisations and volume. This was particularly driven by fodder rape, kale and stubble turnips which almost doubled in quantity whilst the total of all other fodder crops fell. The Kale tonnage is still below the 2022 level. Fodder rape and stubble turnip increases were in both quantities and number of authorisations, reflecting interest from more farmers.

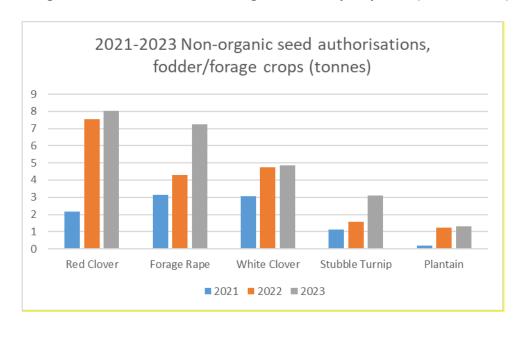
Species common in herbal leys such as chicory, plantain, red and white clovers remained popular and showed increases in authorisations, although volumes remained similar.

Other less mainstream species such as trefoils, lucerne and Sainfoin all showed reductions in both authorisations and quantities.

Table 8: Summary of non-organic forage and fodder seeds 2021-2023

-		2021		2022			2023	
	auths	kg	auths	kg	seeds	auths	kg	seeds
Alfalfa (Lucerne)	9	83.08	4	14.88		3	0.18	
Alsike Clover	93	411.49	49	220.72		14	34.80	
Bird's-foot-trefoil	14	72.20	2	16.32		3	1.03	
Black Medick (Yellow Trefoil)	54	81.73	7	9.78		5	2.90	
Burnet	14	57.63	10	70.76		2	0.03	
Chicory	45	221.40	87	816.62		124	837.29	
Crimson Clover	15	139.22	30	199.10		9	201.84	
Egyptian Cover (Berseem)	1	24.00	5	72.00		1	21.56	
Plantain	24	172.47	82	1,243.82		112	1,297.63	
Red Clover	49	2,166.69	175	7,560.22		302	8,031.72	
Sainfoin	1	105.00	5	78.76		-	-	
Subterranean Clover	3	101.00	1	0.08		4	77.00	
Sweet Clover	7	12.13	1	32.02		-	-	
Vetch spp.	12	661.44	12	1,415.00		11	932.36	
White Clover	323	3,046.60	355	4,740.94		377	4,854.88	
Brassica & other species:								
Fodder Beet	3	28.45	4	21.40	300,000	5	28.00	900,000
Fodder Kale	27	770.80	15	127.20		17	259.48	
Fodder Radish	11	209.37	8	66.65		3	22.00	
Forage Rape	63	3,149.60	115	4,280.56		166	7,257.30	
Stubble Turnip	29	1,141.00	43	1,553.93		61	3,096.00	50,000
White mustard	9	173.82	7	199.50		21	251.93	
Totals:	806	12.829	1.017	22,732		1.240	27,208	

Graph 7: Non-organic seed authorisations, forage/fodder, top 5 species (over 1 tonne), 2021-2023



The Irish organic seed database: ie.organicxseeds.com

This database is a requirement of EU Regulation (EU) 2018/848 which regulates the use of seeds and seed potatoes in organic farming. The database is funded by The Department of Agriculture, Food and the Marine and managed by the Soil Association, working in partnership with FiBL.

There are currently (February 2024) 25 seed companies registered in the database who are able to supply organic seed and/or organic seed potatoes to organic farmers and growers in Ireland (there were 20 registered suppliers at the start of 2023, and 16 at the start of 2022).

Seed suppliers can register species of organic seed and/or organic seed potatoes by variety via a login and password. They are required 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. Registered 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 <u>FiBL</u> relating to the usage of the Organic X Seeds Ireland database (similar databases operate across several EU member states) and are shown in Graph 8.



Graph 8: OXS Usage Republic of Ireland 2023

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 non-organic seed or seed potatoes authorised for use
- 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)

- (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;
- (d) If it is justified for use in research, test in small-scale field trials or for variety conservation purposes agreed by the competent authority of the Member State;

Column 5

The chemical treatment for phytosanitary purposes

There are currently no chemical treatments allowed for phytosanitary purposes in Ireland.

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 - "Ireland Non-Organic Seed Authorisation Report for 2023 Data" - summarises the authorisations granted in 2023 by all of the Irish 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 reads the information as provided by the seed company.

In addition, the A-D "reason/justification" codes which are assigned to each authorisation 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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