Spring Bean Varieties Irish Recommended List 2023

Crop Policy, Evaluation & Certification Division

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IMPORTANT NOTICE

The Department of Agriculture, Food and the Marine (DAFM) has taken all due care in evaluating the performance of the listed varieties for yield, quality and the important agronomic characters over a wide range of soils and environmental conditions, for a minimum period of 3 years. DAFM cannot, however, accept responsibility for any loss or inconvenience arising from any future variation in absolute or relative varietal performance.

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Introduction

This Recommended List details the spring bean varieties that are considered most suitable for growing under Irish conditions. The varieties included on the Recommended List have completed a minimum of three years in DAFM trials. These trials were located in Cork, Kilkenny, Kildare, Meath and Wexford and were grown in accordance with good farming practice. The data presented in this Recommended List is generally based on a three-year average of trials harvested from 2020 to 2022.

Variety Testing Procedure

New varieties are submitted annually to DAFM from Irish Agents acting on behalf of international plant breeders or directly from these breeders. These varieties enter combined National List/ Recommended List trials. All varieties on this Recommended List have shown excellent performance under Irish Conditions. These varieties have been given a positive Value for Cultivation and Use (V.C.U.) status, thus resulting in them being listed in the National and EU Common Catalogues of Agricultural Plant Varieties.

The trials comprise up to 14 varieties annually (The full list of varieties on trial in 2022 are included in Appendix 1) and were grown at up to three DAFM centres and up to three external sites per year. In the trials, the seeding rate as 'seeds per square metre' is 40 with a view to achieving an establishment of 25-30 plants per square metre. The varieties are assessed as to their suitability under Irish conditions for yield, protein content, disease resistance and other agronomic traits. The Recommended List only contains varieties that have shown excellent performance under Irish conditions, which are accepted as being unique and come with specific challenges for growing the crop successfully.

Growers should select the varieties listed because these varieties have been independently and robustly tested by DAFM over a minimum of 3 years under Irish conditions and have been proven to perform in these conditions.

Types of Recommendation

Varieties appearing on this list for the first time are **Provisionally Recommended (PR)** and have completed three years in combined National List/ Recommended List (NL/RL) trials. The number after the PR (e.g. PR-1) indicates the number of years a variety has been provisionally recommended. The eventual status of these varieties is determined by the level of performance in ongoing NL/RL trials; fully **Recommended (R)** classification may be deemed to be merited after a further one, two or a maximum of three years, or alternatively they may be removed from the list at any stage.

Laboratory Analysis

Trial plots are sampled during harvesting to determine the dry matter content. The seed yield of controls and the relative yield of each variety at harvest are adjusted to 15% moisture content. Samples are also tested by FBA laboratories, Cappoquin, Co Waterford for crude protein content and these results are expressed as a percentage of the dry matter.



Changes to the 2023 Spring Bean Recommended List

Fanfare is no longer on the Recommended List due to seed no longer being in production. Caprice and Victus have been upgraded from Provisionally Recommended to fully Recommended.

Recommended List of Spring Beans 2023

	Recommended		
	Caprice	Lynx	Victus
Treated Yield (t/ha @ 15% moisture)	98	102	99
% Crude Protein	103	99	99
Plant Height (cm)	126	129	120
Brackling Resistance (1 – 9, 9 = best)	7	8	5
Lodging Resistance (1 – 9, 9 = best)	(8)	(9)	(7)
Earliness of Maturity (1 – 9, 9 = Earliest)	(7)	(6)	(7)
Resistance to:			
Chocolate Spot (1 – 9, 9 = most resistant)	(7)	(6)	(7)
Downy Mildew (1 – 9, 9 = most resistant)	(7)	(7)	(7)
Rust (1 – 9, 9 = most resistant)	(6)	(5)	(5)
Year first recommended	2022	2019	2022

- Data is based on results of fungicide treated trials with the exception of disease resistance data which uses untreated trial data.
- Yield and quality data is based on trials harvested from 2020 to 2022.
- Disease resistance ratings is based on a scale of 1 to 9 with scores over 8 indicating varieties are very resistant and scores under 4 indicating varieties that are susceptible.
- Figures shown in brackets () are based on limited data and should be treated with caution.
- The control varieties used were Fanfare, Lynx and Victus during 2020-2022. Yield and Crude Protein content are expressed relative to the mean of the control varieties (100 = mean of control varieties).
- The mean yield of the control varieties when adjusted to 15% moisture over the period 2020 to 2022 was 6.9t/ha.
- The mean crude protein content was 23.5% when expressed as a percentage of the dry matter.



Characteristics of Spring Bean Varieties

Caprice (R):	This variety first came onto the Recommended List in 2022 as a Provisionally Recommended variety. It is a good yielding variety with good protein content. It has good brackling resistance and excellent lodging resistance. It has good chocolate spot, downy mildew and moderate resistance to rust. Irl Agent: Goldcrop Ltd. Bred by P.H. Petersen, Denmark.
Lynx (R):	This variety is the highest yielding variety on the Recommended List with good protein content. It has very good brackling and lodging resistance. It has good chocolate spot and downy mildew resistance while moderately resistant to rust. Irl Agent: Seed Technology Ltd. Bred by NPZ Lembke, Germany.
Victus (R):	This variety came onto the Recommended List for the first time in 2022 as a Provisionally Recommended variety. It is a good yielding variety with good protein content. It has moderate brackling resistance and good lodging resistance. It has good chocolate spot and downy mildew resistance while moderately resistant to rust. The breeder claims this variety is low in the anti-nutritional compounds vicine and convicine.



Appendix 1: Varieties evaluated in the Spring Bean National List/

Recommended List Trial 2022

Agent: GC = Goldcrop, ST = Seed Technology

Trial Year 2022: Indicates the number of years the variety was on trial in 2022

	Variety	Trial Year 2022	Agent	Breeder	Breeders Reference
1	Alison	2	ST	NPZ Lembke/ Germany	RLS 77105
2	Callas	1	GC	P.H. Petersen	PHP19-227
3	Caprice	5	GC	P.H. Petersen	PHP15-6
4	Fanfare	11	ST	NPZ Lembke/ Germany	NPZ 8-7870
5	Futura	1	ST	NPZ Lembke/ Germany	RLS97028
6	Genius	1	ST	NPZ Lembke/ Germany	RLS97027
7	LG Bronto	1	ST	Limagrain	LGFN19951
8	LG Stego	1	ST	Limagrain	LGFN19952
9	LG Viper	2	ST	Limagrain	LGFN17947
10	Lynx	7	ST	NPZ Lembke/ Germany	RLS 9151
11	Macho	2	ST	NPZ Lembke/ Germany	RLS 67041
12	Protina	2	GC	P.H. Petersen	PHP18-206
13	Synergy	1	GC	P.H. Petersen	PHP 19-225
14	Victus	5	ST	NPZ Lembke/ Germany	RLS 57301



An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine

RECOMMENDED LISTS

Cereal Varieties Herbages Varieties: (Grasses and Clover) Forage Maize Varieties Winter Oilseed Rape Varieties

CROPS SCHEMES AND SERVICES

Seed Certification Seed Testing

The use of certified seed ensures a high level of varietal purity and germination.

Recommended Lists can be obtained at the following link:

gov.ie - Crops (www.gov.ie)