Spring Bean Varieties



Irish Recommended List 2019

CROPS EVALUATION AND CERTIFICATION DIVISION



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

www.agriculture.gov.ie

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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. The Department cannot, however, accept responsibility for any loss or inconvenience arising from any future variation in absolute or relative varietal performance.

Spring Bean Growing in Ireland

Spring Beans have been a minor crop in Ireland for some time with an average of approximately 3,400 hectares grown between 2012 and 2014. Spring Beans are attractive to tillage farmers as they are a useful break crop, are a legume and hence fix nitrogen and also improve soil structure. A home produced coupled protein payment was introduced in 2015 to incentivise the growing of protein crops in Ireland and to decrease the dependence on imported protein sources. Beans are one of the eligible crops for this aid and the area sown has increased to over 13,000 hectares in 2017. Spring Beans are sown as early as soil conditions allow, generally in the period from late January until late March.

Introduction

This leaflet lists the spring bean varieties that are considered most suitable for growing under Irish conditions. The varieties included on the Recommended List have completed three years in the Department of Agriculture, Food and the Marine trials. These trials were located in Cork, Kilkenny, Kildare and Wexford and were grown in accordance with good farming practice. The data presented in this Recommended List is based on a three year average of trials harvested from 2016 to 2018.

Variety Testing Procedure

New varieties are submitted annually to the Department from Irish Agents acting on behalf of International plant breeders. These varieties enter combined National List/Recommended List trials. The trials comprised a differing number of varieties from year to year, grown at three Department centres and one external site. 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 primarily for yield but also for protein content, disease resistance and other agronomic traits.

All varieties on this Recommended List have shown excellent performance under Irish Conditions. These varieties may be given a positive Value for Cultivation and Use (V.C.U.) status, thus allowing them, at the request of the breeder to be listed in the national and EU common catalogues.

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 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:

Each trial plot is sampled during harvesting to determine the dry matter content. The seed yield of controls and the relative yield of a variety at harvest are based on an adjusted 15% moisture content. A dried seed sample is also tested by FBA laboratories, Cappoquin, Co Waterford for crude protein content and these results are expressed as a percentage of the dry matter.

Table 1: Recommended List of Spring Beans 2019

	Recommended		Provisionally Recommended
	Boxer	Fanfare	Lynx
Treated Yield (t/ha @ 15% moisture)	101	101	106
% Crude Protein	100	100	99
Plant Height (cm)	121	127	124
Resistance to:			
Chocolate Spot	(5)	(6)	(7)
Downy Mildew	(6)	(7)	(7)
Rust	(4)	(7)	(1)
Year of first Recommendation	2016	2016	2019

Data based on results of fungicide treated trials with the exception of disease resistance data which is based on untreated trials. Data based on trials harvested from 2016 to 2018. Figures shown in brackets () are based on extremely limited data and should be treated with caution.

The control varieties used were Boxer, Fanfare and Fuego in 2016 and 2017 while Boxer, Fanfare and Lynx were used in 2018. Yield and Crude Protein content are expressed relative to the mean of the control varieties (100 = mean of control varieties). The mean yield @ 15% moisture of the control varieties over the period 2016 to 2018 was 6.2t/ha and the mean crude protein content was 26.1% when expressed as a percentage of the dry matter.

Characteristics of Spring Bean Varieties in Table 1.

Boxer (R):	Good yielding variety with good protein content. It is the shortest variety on the Recommended List. Irl Agent: Goldcrop Ltd. Bred by Lantmannen Lantbruk, Sweden.
Fanfare (R):	Good yielding variety with good protein content. It is the tallest variety on the Recommended List. Irl Agent: Seed Technology Ltd. Bred by NPZ Lembke, Germany.
Lynx (PR-1):	This variety comes onto the list for the first time in 2019 with a provisional recommendation. It is the highest yielding variety on the Recommended List with good protein content. Irl Agent: Seed Technology Ltd. Bred by NPZ Lembke, Germany.

Appendix 1: Varieties evaluated in the Spring Bean National List/ Recommended List Trial 2018

	Variety	Trial Year 2018	Agent	Breeder	Breeder's Reference
1	Boxer	6	GC	SW Lantmanen	SW-ZG 2007
2	Caprice	1	GC	P.H. Petersen	PHP15-6
3	Fanfare	7	ST	NPZ Lembke/ Ger9many	NPZ 8-7870
4	Lynx	3	ST	NPZ Lembke/ Germany	RLS 9151
5	Mallory	2	ST	NPZ Lembke/ Germany	RLS 47024
6	Stella	1	GC	P.H. Petersen	PHP15-7
7	Tiffany	2	ST	NPZ Lembke/ Germany	RLS 7428
8	Victus	1	ST	NPZ Lembke/ Germany	RLS 57301

Agent: GC = Goldcrop, ST = Seed Technology

Trial Year 2018 indicates the number of years the variety was on trial in 2018

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.

Requests for this booklet should be sent to: Plant Health, Crop Production & Safety Division, Department of Agriculture, Food and the Marine, Administrative Building, Backweston Campus, Stacumny Lane, Celbridge, Co Kildare.

Alternatively, Recommended Lists can be obtained from the Department of Agriculture, Food and the Marine website; www.agriculture.gov.ie

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