# Spring Bean Varieties



### Irish Recommended List 2020

CROP POLICY, EVALUATION AND CERTIFICATION DIVISION



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

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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.

#### 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 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 DAFM 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 2017 to 2019.

#### **Variety Testing Procedure**

New varieties are submitted annually to DAFM 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, at four sites including DAFM centres and outside sites. 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 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.

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:**

Trial plots are sampled during harvesting to determine the dry matter content. The seed yield of controls and the relative yield of a 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 while an additional sample is also analysed abroad for tannin content.

#### **Recommended List of Spring Beans 2020**

	Recommended		
	Boxer	Fanfare	Lynx
Treated Yield (t/ha @ 15% moisture)	97	101	105
% Crude Protein	99	100	99
Plant Height (cm)	125	131	127
Resistance to:			
Chocolate Spot	(5)	(6)	(7)
Downy Mildew	(6)	(7)	(7)
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 2017 to 2019 with the exception of disease data. Disease resistance scoring 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 extremely limited data and should be treated with caution.

The control varieties used were Boxer, Fanfare and Fuego in 2017 while Boxer, Fanfare and Lynx were used in both 2018 and 2019. 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 2017 to 2019 was 6.1t/ha. The mean crude protein content was 26.2% when expressed as a percentage of the dry matter.

#### **Characteristics of Varieties on Recommended List of Spring Beans 2020**

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 (R):	This variety has been upgraded to a fully recommended variety in 2020 following a provisional recommendation in 2019. 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 2019

	Variety	Trial Year 2019	Agent	Breeder	Breeders Reference
1	Apollo	1	GC	P.H. Petersen	PHP15-4
2	Boxer	7	GC	SW Lantmanen	SW-ZG 2007
3	Capri	1	GC	P.H. Petersen	PHP15-3
4	Caprice	2	GC	P.H. Petersen	PHP15-6
5	Daisy	1	GC	P.H. Petersen	PHP15-8
6	Fanfare	8	ST	NPZ Lembke/ Germany	NPZ 8-7870
7	Lynx	4	ST	NPZ Lembke/ Germany	RLS 9151
8	Mallory	3	ST	NPZ Lembke/ Germany	RLS 47024
9	Stella	2	GC	P.H. Petersen	PHP15-7
10	Tiffany	3	ST	NPZ Lembke/ Germany	RLS 7428
11	Victus	2	ST	NPZ Lembke/ Germany	RLS 57301

**Agent:** GC = Goldcrop, ST = Seed Technology

**Trial Year 2019** indicates the number of years the variety was on trial in 2019

#### 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: Crop Policy, Evaluation and Certification Division, Department of Agriculture, Food and the Marine, Administrative Building, Backweston Campus, Stacumny Lane, Celbridge, Co Kildare, W23 X3PH

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

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