

# Spring Beans

## Irish Recommended List for 2017 Sowing

CROPS EVALUATION and CERTIFICATION DIVISION

CONTENTS	PAGE
Spring Bean Growing in Ireland	1
Introduction	2
Variety Testing Procedure	2
Types of Recommendation	2
Laboratory Analysis	2
Table 1: Recommended List of Spring Beans 2017	3
Characteristics of Spring Bean varieties in Table 1	3
Appendix 1: Varieties evaluated in the Spring Bean National List/Recommended List Trial in 2016	4

### 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 in the soil, improve soil structure and can be used as Ecological Focus Areas for Greening purposes. 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 approximately 10,000 hectares in 2016. Spring Beans are sown as early as soil conditions allow, which is 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 yield data presented in this Recommended List is based on a three year average of trials harvested from 2014 to 2016.

## 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 give preference to the varieties listed unless there is compelling evidence that other varieties are more suited to their specific 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 2017.**

	Recommended		
	Boxer	Fanfare	Fuego
<b>Controls* (actual yield t/ha)</b>	8.21		
<b>Treated Yield (t/ha @ 15% moisture)</b>	102	104	97
<b>% Crude Protein**</b>	(98)	(101)	(101)
<b>Plant Height (cm)</b>	(140)	(144)	(136)
<b>Year of first Recommendation</b>	2016	2016	2016
<b>Resistance to:</b>			
<b>Chocolate Spot</b>	(6)	(6)	(6)
<b>Downy Mildew</b>	(6)	(9)	(7)
<b>Rust</b>	(4)	(7)	(4)

**Treated Yield** is in relation to fungicide treated crops.

\*The yield of all varieties on trial were used as the controls in 2014 & 2015 while the average of Boxer, Fanfare and Fuego were used as controls in 2016. The average Seed Yield @ 15% moisture of the control varieties over the period 2014 to 2016 was 8.21t/ha. All other data is shown in brackets to indicate it is based on limited data and should be treated with caution.

\*\* Crude protein content is expressed as a percentage of the dry matter.

Recommended means the variety is recommended for general use. Provisionally Recommended (The number after PR indicates the number of years the variety is provisionally recommended).

### **Characteristics of Spring Bean Varieties in Table 1.**

<b>Boxer:</b>	Good yielding variety with good protein content. Irl Agent: Goldcrop Ltd. Bred by SW Lantmannen, Sweden.
<b>Fanfare:</b>	It has the highest yield on the Recommended List and also the joint highest protein content. Irl Agent: Seed Technology Ltd. Bred by NPZ, Germany.
<b>Fuego:</b>	Good yielding variety with good protein content. It is the shortest variety on the RL. Irl Agent: Seed Technology Ltd. Bred by NPZ, Germany.

## Appendix 1: Varieties evaluated in the Spring Bean National List/Recommended List Trial 2016

	Variety	Trial Year 2016	Agent	Breeder/ Country	Breeders Reference
1	<b>Boxer</b>	4	GC	SW Lantmanen	SW-ZG 2007
2	<b>Fanfare</b>	5	ST	NPZ Lembke/ Germany	NPZ 8-7870
3	<b>Fuego</b>	5	ST	NPZ Lembke/ Germany	NPZ 0-7680
4	<b>Isabell</b>	1	GC	SW Lantmanen	SW 3-04
5	<b>Laura</b>	1	GC	SW Lantmanen	SW 107
6	<b>LG Cartouche</b>	1	ST	Limagrain	LN12939
7	<b>LG Oracle</b>	1	ST	Limagrain	LN13940
8	<b>Lynx</b>	1	ST	NPZ Lembke/ Germany	RLS 9151

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

**Trial Year 2016** indicates the number of years the variety was on trial in 2016

## RECOMMENDED LISTS

Cereal Varieties

Herbages Varieties: (Grasses and Clover)

Forage Maize Varieties

Winter Oilseed Rape

## CROPS SCHEMES AND SERVICES

Seed Certification

Seed Testing

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

*Requests for booklets 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](http://www.agriculture.gov.ie)**