



**PROTECT YOUR CROPS**  
WITH THE NATURAL  
POWER OF LUPINE

**CERTIS**  
BIORATIONALS

**PROBLAD** 

The novel, broad-spectrum Biorational fungicide

# ORIGIN & COMPOSITION

PROBLAD® is a biological fungicide of natural origin

It is a sweet lupin concentrate plant extract manufactured by CEV, S.A. (Cantanhede, Portugal) from germinated seeds of *Lupinus albus* sweet varieties used as raw material



# CROPS & TARGETS

Broad-spectrum



**Strawberry:**

Powdery mildew and Grey mould



**Tomato & aubergine:**

Powdery mildew and Grey mould



**Grapevine & table grape:**

Powdery mildew and Grey mould



**Rice:** Rice blast



**Stone fruits:**

Brown rot



**Several minor crops:**

Powdery mildew and Grey mould

# What is innovative about PROBLAD?



1. First plant protection product based on extract from sweet lupin seeds
2. Broad spectrum fungicide
3. Novel and unique multi-site mode of action



# What are the scientific values/uniquenesses?

1. High and regular performances
2. Selective in all crops, no impact on transformation processes
3. Compatible with IPM programs and with a large majority of PPP

Crop	Target	Assessment type	No. of trials	Mean % efficacy of PROBLAD®	Mean % efficacy of Chemical reference*
Grapevine	Grey mould	Bunches % severity	19	67.5	74.6
	Powdery mildew	Bunches % severity	16	68.9	63.1
		Leaves % severity	11	78.6	67.9
Stone fruit	Brown rot	Fruits Incidence after storage %	6	61.9	68.5
Tomato	Powdery mildew	Leaves % severity - indoor	8	71.9	73
		Leaves % severity - outdoor	12	87.2	89.2
Rice	Rice blast	Leaves % Severity	6	69.1	78.0
		Panicule % severity	14	63.2	77.9
Strawberry	Grey mould	Fruit incidence % - outdoor	14	58.2	65.9

# What is the contribution to sustainable agriculture?

## Resistance management

FRAC group BM 01  
multi-site

## Meet food chain requirements

No residues definition  
No or short PHIs

## Intended to be organic farming listed

Application to Annex II of  
Regulation (EC) 889/2008  
on going

## Reduce the use of conventional products

Use intended in program as  
any conventional fungicides

## Provide solution for minor crops

Intended to be registered on  
a wide range of minor crops  
in all countries



## How PROBLAD will assist on the uptake of the Biocontrol in the market?

1. All European growers will have access to PROBLAD<sup>®</sup> with a wide label for indoor and outdoor usage
2. Easy to handle, PROBLAD<sup>®</sup> can be stored and used as any other PPP
3. PROBLAD<sup>®</sup> can be easily integrated in a spray program, both in organic and conventional farming
4. Active research running to expand the label to other usages including arable crops

# PROBLAD<sup>®</sup>



**PROTECT YOUR CROPS**  
WITH THE NATURAL  
POWER OF LUPINE

- New natural origin fungicide with novel and unique multi-site MoA
- Highly effective and consistent control against many pathogens
- Selective in all crops and compatible with IPM programs
- No residues helping growers to meet increasing food chain requirements

**CERTIS**  
Growing Together

**PROBLAD<sup>®</sup>** 