





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







High & regular performances

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



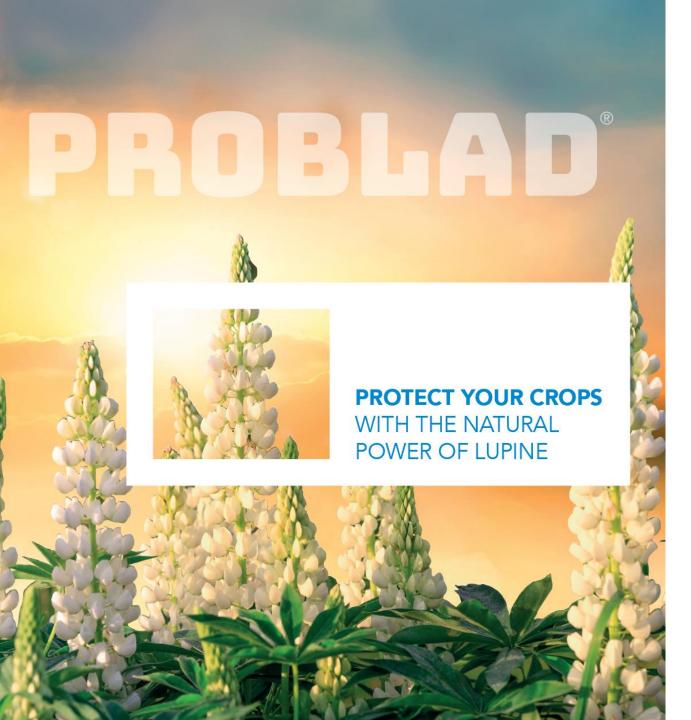


How PROBLAD will assist on the uptake of the Biocontrol in the market?

- 1. All European growers will have access to PROBLAD® with a wide label for indoor and outdoor usage
- 2. Easy to handle, PROBLAD® can be stored and used as any other PPP
- 3. PROBLAD® 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







- 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



