



BONI PROTECT grower trials results

Several leading growers and advisors collaborated with Nufarm in conducting a range of BONI PROTECT grower trials in commercial apple and pear orchards last summer.



The objective was to compare rots at gradeout ex-store, between the growers' standard storage disease fungicide programme and with the inclusion of BONI PROTECT in different parts of otherwise comparable orchards.

European trials have shown BONI PROTECT gives **near comparable efficacy** to chemical standards such as boscalid, pyraclostrobin and fludioxonil but with **a key advantage of no residues**.

A very positive response to BONI PROTECT was seen in a Conference pear trial where rot levels were higher, especially botrytis which is often a concern but is a key strength of BONI PROTECT.

Gala apple trial, Kent:

	Treatment 1	Treatment 2	Treatment 3	Rots	Loss	
	w/c 17 Aug	w/c 31 Aug	w/c 7 Sept	%	T/ha @ 50 T/ha	T/ha @ £450/T
Standard programme	boscalid + pyraclostrobin 0.8 kg/ha	boscalid + pyraclostrobin 0.8 kg/ha	-	11.6	5.80	2610
plus BONI PROTECT*	boscalid + pyraclostrobin 0.8 kg/ha	boscalid + pyraclostrobin 0.8 kg/ha	BONI PROTECT 1.5 kg/ha	6.0	3.00	1350
replace chem inputs...	BONI PROTECT 1.5 kg/ha	BONI PROTECT 1.5 kg/ha	BONI PROTECT 1.5 kg/ha	5.9	2.95	1328
reduce chem inputs...	boscalid + pyraclostrobin 0.8 kg/ha	BONI PROTECT 1.5 kg/ha	BONI PROTECT 1.5 kg/ha	6.9	3.45	1553

* £1260/ha yield preserved by  BONI PROTECT* applied on 7th September in addition to standard programme.

Conference pear trial, Cambridgeshire:

	Treatment 1	Treatment 2	Rots		Loss	
	02 Sept	14 Sept	kg/20 bins	%	T/ha @ 20 T/ha	£/ha @ £500/T
Standard programme	fludioxonil 0.23 kg/ha	-	689	9.9	1.99	993
plus BONI PROTECT#	fludioxonil 0.23 kg/ha	BONI PROTECT 1.5 kg/ha	378	5.4	1.09	545

£448/ha yield preserved by  BONI PROTECT# applied on 14th September in addition to standard prog.



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Rot levels were generally low in the apple trials – typical of the mainly dry, settled weather up to last season's harvest.

Significant differences between growers' standard programmes and BONI PROTECT were not generally seen.



Storage trials 2020/21 results summary:

Site >>>	Kent 1	Kent 1	Kent 2	Kent 3	Camb. 1
Variety	Crimson Crisp	Bramley	Cox	Gala	Conference pear
Harvest date	Sept 2020	Sept 2020	03/09/2020	07/09/2020	17/09/2020
Gradeout date	29/01/2021	08/03/2021	30/12/2020	16/04/2021	06/05/2021
Treatment	% rots at gradeout >>>				
Standard programme	3.6	1.0	0.5	6.0	9.9
BONI PROTECT	0.6	3.0	0.8	5.9	7.1
Fludioxonil fb. BONI PROTECT	-	-	-	-	5.4

Key outcomes:

These are encouraging results, as comparable performance from replacement of chemical fungicides with BONI PROTECT near harvest offers three key advantages:-

- ✓ **Reduction of chemical residues.**
- ✓ **“Frees-up” limited applications of chemical fungicides,** for timelier use earlier in the season.
- ✓ **Improves disease control and manages resistance risks** by integrating the unique, anti-resistance “blocking” mode of action from BONI PROTECT.



FURTHER INFORMATION

Nufarm Technical updates are eligible for 1 BASIS CPT/year Ref: CP/112075/2122/g. Email claim to linda@basis-reg.co.uk

Boni Protect contains *Aureobasidium pullulans* strains DSM 14940 & DSM 14941.

Boni Protect is a trademark of Bio-ferm GmbH.

Details of application rates and timings are given in Nufarm labels and product literature, both of which can be accessed from our website www.nufarm.com/uk. Alternatively, ring the Nufarm helpline on 01274 694714, Monday to Friday 9.00 - 17.00

Use plant protection products safely. Always read the label and product information before use. For label and safety information, refer to the Nufarm website www.nufarm.com/uk. Nufarm UK Ltd, Wyke Lane, Wyke, Bradford, BD12 9EJ.

