

Supplementary material

Table S1. Date of fungicide application, type and costs performed on two treated strategies (Routine and DSS) in three crop seasons (2021, 2022 and 2023). DAE: days after emergence.

2021						
Date	DAE	Product	Composition	Dose/ha	Routine (€/dose)	DSS (€/dose)
24 th -Jun	15	Mancolaxyl	Metalaxyl 85% + Mancozeb 64%	3.0 kg	32.7	
8 th -Jul	29	Volare	Propamocarb 52.5% + Fluopicolide 6.25%	1.6 L	56.7	
12 th -Jul	33	Valbon	Benthiavalicarb 1.75% +Mancozeb 70%	1.8 kg		36.0
23 rd -Jul	44	Xanilo	Cymoxanil 45%	0.27 kg	27.0	
		Volare	Propamocarb 52.5% + Fluopicolide 6.25%	1.6 L	56.7	
30 st -Jul	51	Volare	Propamocarb 52.5% + Fluopicolide 6.25%	1.6 L		56.7
4 th -Aug	56	Equation pro	Cymoxanil 30% + Famoxadone 22.5%	0.4 kg	33.4	
		Asbelto	Dimetomorf 50%	0.5 kg	14.7	
18 th -Aug	70	Milraz pro	Cymoxanil 33% + Zoxamide 33%	0.45 kg	29.8	29.8
		Asbelto	Dimetomorph 50%	0.5 kg	14.7	
4 th -Sep	87	Leimay	Amisulbrom 20%	0.5 L	31.5	
Total (number of sprays)					6.0	3.0
Total (€)					297.3	122.5

2022						
Date	DAE	Product	Composition	Dose/ha	Routine (€/dose)	DSS (€/dose)
27 th -Jun	26	Axidor	Propamocarb 33.52% + Cymoxanil 5%	2.5 kg	52.5	
1 st -Jul	30	Axidor	Propamocarb 33.52% + Cymoxanil 5%	2.5 kg		52.5
13 rd -Jul	42	Enervin top	Ametoctradin 12% + Metiran 44%	2.0 kg	49.9	
22 nd -Jul	51	Enervin top	Ametoctradin 12% + Metiran 44%	2.0 kg	49.9	
1 st -Aug	61	Volare	Ametoctradin 12% + Metiran 44%	1.6 L	57.6	57.6
17 th -Aug	77	Volare	Ametoctradin 12% + Metiran 44%	1.6 L	57.6	
29 th -Aug	89	Zorvec Endavia	Oxathiapiprolin 3% + Benthiavalicarb 7%	0.5 L	68.7	68.7
		Curzate	Cymoxanil 60%	0.2 kg	16.9	
12 th -Sep	103	Tizca	Fluazinam 50%	0.4 L	31.30	
Total (number of sprays)					7.0	3.0
Total (€)					384.5	178.8

2023						
Date	DAE	Product	Composition	Dose/ha	Routine (€/dose)	DSS (€/dose)
16 th -Jun	26	Cyclo max	Metalaxyl-M 2.85% + Cupric hydroxide 21.5%	3.5 kg	52.5	
		Xanilo	Cymoxanil 45%	0.27 kg	17.8	
21 st -Jun	31	Axidor	Cymoxanil 5% + Propamocarb 33.52%	2.5 kg		71.5
26 th -Jun	36	Axidor	Cymoxanil 5% + Propamocarb 33.52%	2.5 kg	71.5	
4 th -Jul	44	Volare	Propamocarb hydrochloride 625 g L ⁻¹ + Fluopicolid 62.5 g L ⁻¹	1.6 L	62.4	
		Xanilo	Cymoxanil 45%	0.27 kg	17.8	
7 th -Jul	47	Zorbec Endavia	Benthiavalicarb 7% + Oxathiapiprolin 3%	0.5 L		71.2
		Xanilo	Cymoxanil 45%	0.27 kg		17.8
12 th -Jul	52	Revus	Mandiopropamid 23.4%	0.5 L	51.0	
		Xanilo	Cymoxanil 45%	0.27 kg	17.8	
21 st -Jul	61	Axidor	Cymoxanil 5% + Propamocarb 33.52%	2.5 kg	71.5	
24 th -Jul	64	Axidor	Cymoxanil 5% + Propamocarb 33.52%	2.5 kg		71.5
1 st -Aug	72	Axidor	Cymoxanil 5% + Propamocarb 33.52%	2.5 kg	71.5	
		Cimoxate 45	Cymoxanil 45%	0.27 kg	15.9	
11 th -Aug	82	Daramun	Cyazofamid 10%	0.8 L		39.9
		Cimoxate 45	Cymoxanil 45%	0.27 kg		15.9
16 th -Aug	87	Daramun	Cyazofamid 10%	0.8 L	39.9	
		Cimoxate 45	Cymoxanil 45%	0.27 kg	15.9	
25 th -Aug	96	Cimoxate Cu	Cymoxanil 3% + Cuprocalcium sulphate 22.5%	3.0 kg	32.7	
31 st -Aug	102	Cimoxate Cu	Cymoxanil 3% + Cuprocalcium sulphate 22.5%	3.0 kg	32.7	
Total (number of sprays)					9.0	4.0
Total (€)					571.2	288.0