

Supplementary information

Table S1. Fungicide application in TOMCAST plots during the three potato crop seasons.

Active ingredient	Effect	Registry Number	Product name	Rate	Date
2020					
Mancozeb 15% + Copper Oxychloride 10% + Cuprocalcium Sulfate 10%	Fungicide	19525	Covinex Forte mz	1.5 kg/ha	15/5/20
Dimethomorf 7.5% + Mancozeb 66.7%	Fungicide	Es-00295	Spyrit M wg	2.5 kg/ha	4/6/20
Mancozeb 15% + Copper Oxychloride 10% + Cuprocalcium Sulfate 10%	Fungicide	19525	Covinex Forte mz	1.5 kg/ha	15/6/20
Dimethomorph 9% + Propamocarb 50%	Fungicide	Es-00151	Spyrit Pro	2 l/ha	28/6/20
Dimethomorf 7.5% + Mancozeb 66.7%	Fungicide	Es-00295	Spyrit M wg	2.5 kg/ha	11/7/20
2021					
Mancozeb 64% + Metalaxil 3.9%	Fungicide	22029	Ridomild Gold	2.5 kg/ha	11/6/21
Dimetomorf 9% + Propamocarb 50%	Fungicide	Es-00151	Spyrit pro	2 l/ha	23/6/21
Difenoconazol 25%	Fungicide	18767	Score 25	0.5 l/ha	23/7/21
Oxícloruro de cobre 18% + Sulfato cuprocalcico 37% + Mancozeb 15%	Fungicide	19525	Covinex Forte MZ	1.5 kg/ha	11/7/21
Difenoconazol 25%	Fungicide	18767	Score 25	0.5 l/ha	11/7/21
2022					
Difenoconazol 25%	Fungicide	18767	Artic	0.5 l/ha	11/6/22
Difenoconazol 25%	Fungicide	18767	Zolfe	0.5 l/ha	25/6/22
Fosetil-Al 50% + Cimoxanilo 4% + Folpet 25%	Fungicide	23148	Pearze triple	2 kg/ha	15/7/22
Fosetil-Al 50% + Cimoxanilo 4% + Folpet 25%	Fungicide	23148	Pearze triple	2 kg/ha	1/8/22

Table S2. Herbicides and insecticides applied in TOMCAST and Control plot during three potato crop seasons.

Active ingredient	Effect	Registry Number	Product name	Rate	Date	Plot
2020						
Metribuzine 70%	Herbicide	Es-00286	Citation	0.5 kg/ha	25/4/20	Control and TOMCAST
Chlorantraniliprole 10% + Lambda-Cyhalothrin 5%	Insecticide	25454	Ampligo	0.4 l/ha	30/5/20	Control and TOMCAST
Cypermethrin 10%	Insecticide	19618	Ralbi	0.3 l/ha	30/5/20	Control and TOMCAST
2021						
Metribuzine 70%	Herbicide	Es-00286	Citation	0.5 kg/ha	24/4/21	Control and TOMCAST
Prosulfocarb 80%	Herbicide	18087	Bastos	3 l/ha	24/4/21	Control and TOMCAST
Chlorantraniliprole 10% + Lambda-Cyhalothrin 5%	Insecticide	25454	Ampligo	0.3 l/ha	11/6/21	Control and TOMCAST
2022						
Metribuzine 70%	Herbicide	22065	Eclipse 70 wg	0.75 kg/ha	28/5/22	Control and TOMCAST
Quizalofop-p-etil 5%	Herbicide	24082	Stuka	1 l/ha	28/5/22	Control and TOMCAST
Acetamiprid 20%	Insecticide	23376	Mospilan	0.25 kg/ha	25/6/22	Control and TOMCAST