Table 4. Summary for a multinomial logistic regression model after stepwise variable selection and important variables identified by a random forest classifier algorithm in the Boruta package[a]

	Synthetic				Non-synthetic				Mixture				Variable importance
	Non-synthetic		Mixture		Synthetic		Mixture		Non-synthetic		Synthetic		
	Log(OR)	*P*-value	Log(OR)	*P*-value	Log(OR)	*P*-value	Log(OR)	*P*-value	Log(OR)	*P*-value	Log(OR)	*P*-value	
(Intercept)	-0.73	0.13	-1.8	0.01	0.73	0.13	-1.1	0.13	1	0.2	1.8	0.01	
Spray date	-1.6	<0.001	0.44	0.001	1.6	<0.001	2	<0.001	-2	<0.001	-0.44	0.001	75.8
First spray date	-0.31	0.004	-0.63	<0.001	0.31	0.004	-0.32	0.017	0.32	0.017	0.63	<0.001	40.3
Susceptibility V6-strains													15.8
1	10	<0.001	-8.1	<0.001	-8.1	<0.001	-29	<0.001	50	<0.001	-4.5	<0.001	
2	0.53	0.5	0.87	0.4	-0.53	0.5	0.34	0.8	-0.34	0.8	-0.87	0.4	
3	0.06	0.7	0.23	0.5	-0.06	0.7	0.17	0.6	-0.17	0.6	-0.23	0.5	
4	0.46	0.3	1.7	0.01	-0.46	0.3	1.3	0.051	-1.3	0.05	-1.7	0.01	
5	0.08	>0.9	1.2	0.2	-0.08	>0.9	1.1	0.2	-1.1	0.2	-1.2	0.2	
Susceptibility non-V6 strains													14.9
1	-9.9	<0.001	8.4	<0.001	8	<0.001	29	<0.001	-51	<0.001	4.2	<0.001	
2	-0.9	0.2	-0.57	0.6	0.9	0.2	0.34	0.7	-0.33	0.7	0.57	0.6	
3	0.06	0.7	0.23	0.5	-0.06	0.7	0.17	0.6	-0.17	0.6	-0.23	0.5	
4	-0.51	0.14	-0.95	0.01	0.51	0.14	-0.44	0.2	0.44	0.2	0.95	0.01	
Pruning thoroughness													24.9
2	0.14	0.6	-0.06	0.9	-0.14	0.6	-0.2	0.5	0.2	0.5	0.06	0.9	
3	0.35	0.2	0.4	0.3	-0.35	0.2	0.04	0.9	-0.04	0.9	-0.4	0.3	
4	0.46	0.2	0.15	0.7	-0.46	0.2	-0.31	0.4	0.31	0.4	-0.15	0.7	
5	0.13	0.7	-0.27	0.5	-0.13	0.7	-0.4	0.3	0.4	0.3	0.27	0.5	
Disease incidence	-0.08	0.5	0.37	0.003	0.08	0.5	0.46	<0.001	-0.46	<0.001	-0.37	0.003	28.5
Disease incidence in May	-0.02	0.9	0.01	>0.9	0.02	0.9	0.04	0.7	-0.04	0.7	-0.01	>0.9	6.3
Flag shoot incidence	0.18	0.3	-8	<0.001	-0.18	0.3	-8.5	<0.001	7.6	<0.001	7.4	<0.001	4.3

Previous flag shoot incidence		-0.03	0.8	-0.06	0.7	0.03	0.8	-0.04	0.8	0.04	0.8	0.06	0.7	
Year														36.6
2015		-1.6	<0.001	-1.3	<0.001	1.6	<0.001	0.31	0.3	-0.31	0.3	1.3	<0.001	
2016		-0.3	0.3	1.2	0.001	0.3	0.3	1.5	<0.001	-1.5	<0.001	-1.2	0.001	
2017		0.45	0.046	1.3	<0.001	-0.45	0.046	0.82	0.001	-0.82	0.001	-1.3	<0.001	
Grower														59.8
2		0.69	0.035	-2.3	<0.001	-0.69	0.035	-3	<0.001	3	<0.001	2.3	<0.001	
3		3	<0.001	1.5	0.026	-3	<0.001	-1.4	0.005	1.4	0.005	-1.5	0.026	
4		3	<0.001	-0.78	0.2	-3	<0.001	-3.8	<0.001	3.8	<0.001	0.78	0.2	
5		5.5	<0.001	3.1	0.003	-5.5	<0.001	-2.4	<0.001	2.4	<0.001	-3.1	0.003	
6		3.5	<0.001	0.6	0.2	-3.5	<0.001	-2.9	<0.001	2.9	<0.001	-0.6	0.2	
7		2.3	<0.001	-2.2	<0.001	-2.3	<0.001	-4.5	<0.001	4.5	<0.001	2.2	<0.001	
8		4.2	<0.001	0.73	0.13	-4.2	<0.001	-3.5	<0.001	3.5	<0.001	-0.73	0.13	
Model fit	**AIC**	1885.7												
	Residual deviance	1813.7												
	LR test	1135.4 ($P \leq 0.001$)												
	MCFadden's R^2	0.3917												
	N	1585												

[a] The baseline fungicide type (Synthetic, Non-synthetic, or Mixture) is shown in the top row of the table. Switching from the baseline to another fungicide type is as indicated in the second row of the table. Log(OR) is log odds ratio. *P*-values indicate whether the log odds ratio is significantly different from 0 (which transforms to an odd ratio of 1).