

Chemical control of grey mould (*Botrytis cinerea*) in raspberries



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Treatments 2010

1. control

2. Signum 1 kg/ha
a.i. boscalid and pyraclostrobin - 3 sprayings during flowering
(standard)

3. Signum 1 kg/ha - 2 sprayings during flowering

4. Signum 1 kg/ha - 4 sprayings during flowering

5. Bay 18500 F 1 l/ha
a.i. fluopyram and tebuconazol - 3 sprayings during flowering

6. Frupica SC 0,7 l/ha
a.i. mepanipirim - 3 sprayings during flowering



Material and methods

- **planting distance: 3 m x 0,4 m**
- **planting year: 2006**
- **6 m row per plot**
- **4 replications**
- **cultivar Tulameen**
- **1.000 l water per hectare**
- **evaluation: fruit sample of nearly 250 g per plot and harvest date,
storage at 15 °C
counting the number of rotted fruits after two or five days
calculation the percentage of rotted fruits**

Results 2010 (Botrytis fruit rot, %)

date of sampling	12.07.	15.07.	19.07.	22.07.	26.07.	29.07.	mean
date of evaluation	16.07.	20.07.	22.07.	26.07.	31.07.	01.08.	value
1. control	20,4	45,1	22,3	53,2	71,6	37,1	41,6
2. Signum, 3x	12,5	22,2	10,6	21,1	22,4	21,4	18,4
3. " , 2x	11,8	22,6	10,3	24,9	24,8	19,1	18,9
4. " , 4x	9,1	23,8	9,8	24,1	24,8	22,8	19,1
5. BAY 18500 F, 3x	10,1	9,9	9,1	42,8	44,4	23,7	23,3
6. Frupica, 3x	11,5	12,8	13,8	50,4	47,9	29,0	27,6
L.S.D. 5 % (t-test)	5,2	12,0	9,3	21,9	15,8	12,5	9,7

Treatments 2011

1. control
2. Switch 1 kg/ha
a.i. fludioxonil and cyprodinil - 3 sprayings during flowering
(standard)
3. Switch 1 kg/ha - 2 sprayings during flowering
4. Switch 1 kg/ha - 4 sprayings during flowering
5. BAY 18500 F 1 l/ha
a.i. fluopyram and tebuconazol - 3 sprayings during flowering
6. Vacciplant 1,5 l/ha
extract of the brown algae
'Laminara digitata' (plant tonic) - 3 sprayings during flowering

Results 2011 (Botrytis fruit rot, %)

date of sampling	27.6.	30.6.	5.7.	7.7.	11.7.	14.7.	18.7.	21.7.	mean
date of evaluation	30.6.	4.7.	10.7.	11.7.	16.7.	17.7.	21.7.	23.7.	value
1. control	22,7	29,0	59,8	36,8	37,9	26,7	38,5	25,3	34,6
2. Switch, 3x	3,5	6,2	16,6	18,2	11,8	8,9	4,1	4,2	9,2
3. " , 2x	2,8	13,2	27,0	18,9	21,0	9,8	4,0	3,2	12,5
4. " , 4x	4,6	9,8	17,0	10,9	14,2	7,5	5,2	0,7	8,7
5. BAY 18500 F, 3x	4,8	11,1	25,4	15,8	17,8	11,9	10,5	2,1	12,4
6. Vacciplant, 3x	8,0	28,5	48,2	37,5	26,4	20,9	26,4	18,2	26,8
L.S.D. 5 % (t-test)	5,1	9,8	16,9	12,2	8,0	7,8	5,8	8,0	5,4

Treatments 2012

1. control
2. Switch 1 kg/ha - 3 sprayings during flowering
3. Switch 1 kg/ha - 2 sprayings during flowering
4. Switch 1 kg/ha - 4 sprayings during flowering
5. Malvin WG 1,8 kg/ha
a.i. captan - 3 sprayings during flowering
6. Sakalia 2,5 l/ha
plant tonic - 3 sprayings during flowering

Results 2012 (Botrytis fruit rot, %)

date of sampling	12.07.	16.07.	19.07.	22.07.	mean
date of evaluation	14.07.	18.07.	20.07.	24.07.	value
1. control	33,2	36,2	34,5	35,0	34,7
2. Switch, 3x	6,5	5,4	8,6	7,9	7,1
3. " , 2x	3,4	4,8	7,6	10,5	6,6
4. " , 4x	4,3	4,7	4,0	2,8	4,0
5. Malvin, 3x	8,5	17,4	11,1	3,4	10,1
6. Sakalia, 3x	19,6	33,4	27,7	23,6	26,1
L.S.D. 5 % (t-test)	5,7	8,9	6,0	5,1	3,4

Conclusions

- **three sprayings over the flowering period are a good standard**
- **an additional fourth treatment after flowering normally will give no more benefit**
- **only two sprayings include the risk of more losses through fruit rot**
- **Frupica, Bay 18500 F and Malvin are less effective than Signum and Switch**
- **the plant tonics Vacciplant and Sakalia can reduce the infections with Botrytis, but the efficacy is not high**

Treatments 2013

- **changing of chemical products**
- **changing of chemicals with plant tonics**
- **new chemical products**
- **new plant tonics**

Thank you for your attention!