

1 **Supplement material to:**

2 **Crop harvest in Central Europe causes episodes of high airborne *Alternaria***  
3 **spore concentrations in Copenhagen.**

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1 Table S1. Observed *Alternaria* spores in grab samples from the harvesting machine, the  
 2 calculated concentration of spores/m<sup>3</sup> in the exhaust and corresponding emission factor from  
 3 harvested fields

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Date	Crop	Remarks	Spores on slide (0.6552cm <sup>2</sup> )	Concentration (spores/m <sup>3</sup> )	Emission factor per ha
18.8.2011	Wheat		721	4.0E+07	6.7E+10
18.8.2011	...	Residual control of previous sample	106	---	---
21.8.2011	Barley		630	3.5E+07	5.9E+10
21.8.2011	Barley		592	3.3E+07	5.5E+10
21.8.2011	Barley		662	3.7E+07	6.2E+10
21.8.2011	...	Residual control of previous sample	76	---	---
10.9.2011	Wheat		376	2.1E+07	3.5E+10
10.9.2011	Wheat		172	9.6E+06	1.6E+10
16.9.2011	Barley	Soil very wet.	131	7.3E+06	1.2E+10
16.9.2011	Barley	Soil very wet.	186	1.0E+07	1.7E+10

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1 Table S2a. Daily measured precipitation in mm/day in the potential source region to the  
 2 episodes of *Alternaria* spore concentrations (spores/m<sup>3</sup>) that were measured 30<sup>th</sup>-31<sup>st</sup> Aug  
 3 2008. The last 7 days of recorded precipitation until the potential episode is used an indicator  
 4 of good harvesting possibilities. ‘-‘ usually means no precipitation was recorded, but could  
 5 potentially also mean technical problems.

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Station/Date	31	30	29	28	27	26	25
Kastrup	0.0	0.0	3.3	3.8	6.6	0.0	0.0
Gedser	0.0	0.0	2.0	0.0	0.8	0.0	0.3
Beldringe	0.0	0.0	-	0.0	0.0	0.0	0.3
Abed	-	0.0	3.0	0.0	2.3	0.0	0.0
Roskilde/Tune	0.0	0.0	1.8	2.8	7.1	0.0	0.5
Hörby	0.0	0.0	2.8	8.1	3.8	0.0	0.8
Helsingborg	0.0	0.0	1.5	4.8	5.8	0.0	2.8
Berling_Tegel	0.0	0.0	0.1	0.8	0.0	0.0	0.0
Hamburg	0.0	0.0	0.0	0.0	0.0	0.7	0.0
Hannover	0.0	0.0	0.0	0.5	0.0	0.0	0.0

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1 Table S2b. Daily measured precipitation in mm/day in the potential source region to the  
 2 episodes of *Alternaria* spore concentrations (spores/m<sup>3</sup>) that were measured 10<sup>th</sup>-11<sup>th</sup> Aug  
 3 2010. The last 7 days of recorded precipitation until the potential episode is used an indicator  
 4 of good harvesting possibilities. ‘-‘ usually means no precipitation was recorded, but could  
 5 potentially also mean technical problems.

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Station/Date	11	10	09	08	07	06	05
Kastrup	0.3	0.0	28.4	0.3	0.0	1.8	2.8
Skrydstrup	3.0	0.0	2.0	0.3	0.0	0.0	2.0
Gedser	0.5	0.0	0.3	0.0	0.0	1.0	2.0
Beldringe	0.0	0.0	0.0	0.0	0.0	0.0	-
Abed	0.3	0.0	0.0	0.3	0.0	-	0.0
Roskilde/Tune	0.0	0.0	0.0	0.0	0.0	0.0	1.8
Hörby	0.0	0.3	21.3	1.8	1.0	0.0	0.0
Helsingborg	0.0	0.0	24.6	0.0	0.0	0.0	1.8
Berling_Tegel	0.0	0.0	0.3	0.3	0.0	11.6	0.0
Hamburg	2.1	0.7	0.7	0.1	0.0	0.0	4.5
Hannover	0.8	3.4	0.0	0.2	0.1	0.0	0.1



1 Table S2c. Daily measured precipitation in mm/day in the potential source region to the  
 2 episodes of *Alternaria* spore concentrations (spores/m<sup>3</sup>) that were measured 15<sup>th</sup>-16<sup>th</sup> Aug  
 3 2010. The last 7 days of recorded precipitation until the potential episode is used an indicator  
 4 of good harvesting possibilities. ‘-‘ usually means no precipitation was recorded, but could  
 5 potentially also mean technical problems.

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Station/Date	16	15	14	13	12	11	10
Kastrup	0.5	49.3	0.0	25.4	1.8	0.3	0.0
Roskilde/Tune	0.3	36.8	0.0	29.7	3.0	0.0	0.0
Hörby	5.3	8.1	0.0	22.9	0.0	0.0	0.3
Helsingborg	0.0	19.8	0.0	22.9	0.8	0.0	0.0
Poznan	0.0	0.0	3.0	0.0	0.3	0.0	0.0
Plock	0.0	0.0	0.0	0.0	0.0	36.6	0.0
Warszawa	1.5	0.0	0.0	2.0	0.0	0.0	15.0
Kolo	6.1	0.0	4.1	0.0	0.0	0.0	4.1
Wielkopolski	0.0	12.7	7.9	8.4	0.0	0.0	1.8
Olsztyn	1.0	0.0	5.1	0.0	0.0	0.0	20.3
Elblag	1.5	0.0	0.0	0.0	0.0	4.1	0.0

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1 Table S2d. Geographical coordinates of precipitation stations obtained from National Centre  
 2 for Environmental Prediction (NCEP) and Deutcher Wetterdienst (only German stations)

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ID	Name	Lat(dig)	Lon(dig)
061800	Kastrup	55.617	12.650
061700	Roskilde/Tune	55.583	12.133
026230	Hörby	55.867	13.667
026110	Helsingborg	56.033	12.767
123300	Poznan	52.417	16.850
123600	Plock	52.583	19.733
123750	Warszawa	52.167	20.967
123450	Kolo	52.200	18.667
123000	Wielkopolski	52.750	15.283
122720	Olsztyn	53.767	20.417
121600	Elblag	54.167	19.433
061100	Skrydstrup	55.233	9.267
061490	Gedser	54.567	11.967
061200	Beldringe	55.483	10.333
061410	Abed	54.833	11.333
03313	Berling_Tegel	52.550	13.300
01459	Hamburg	53.633	9.983
01538	Hannover	52.450	9.667

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