

Supplement to:

Journal of Agriculture and Rural Development in the Tropics and Subtropics

Vol. 120 No. 1 (2019) 71–77 | <https://doi.org/10.17170/kobra-20190613558>



Distribution of *Alternaria* leaf blight of sunflowers caused by
Alternaria alternata in South Africa

Mahlane Godfrey Kgatle, Bradley Flett, Mariette Truter, Moses Ramusi, Theresa Aveling

Table S1: *The environmental conditions (temperature, relative humidity and Rainfall) of the surveyed sunflower localities during the 2012/13, 2013/14 and 2014/15 production seasons.*

Season	Locality	Temperature (°C)*	Relative humidity (%)*	Rainfall (mm)*
2013	Settlers	30	94	110
2013	Arlington	29	88	77
2013	Viljoenskroon - Rietpan	28	88	66
2013	Boschpoort - Sannieshof	30	85	49
2013	Sannieshof	30	85	49
2013	Dwaalboom	27	89	77
2013	Delmas	30	90	54
2013	Lichtenburg 1	29	80	68
2013	Ventersdorp	29	85	73
2014	Vredefort -1	27	84	92
2014	Vredefort -2	27	84	92
2014	Settlers	31	92	70
2014	Steinfast	27	84	108
2014	Carletonville	27	86	97
2014	Rustenburg 3	29	84	112
2014	Brits	28	93	78
2014	Lichtenburg 1	27	93	108
2014	Wesselsbron	28	93	79
2014	Kroonstad - Wesselsbron	27	93	45
2015	Vlaklaagte	27	81	53
2015	Welgelegen	30	83	54
2015	Rustenburg 1	29	81	55
2015	Rustenburg 2	29	81	55
2015	Rustenburg 3	29	81	55
2015	Lichtenburg 1	29	82	63
2015	Lichtenburg 2- Coligny	29	82	63
2015	Lichtenburg 3- Vlakfontein	29	82	62
2015	Lichtenburg 4- Vlakplan	29	82	63
2015	Ventersdorp	30	86	98

*Means of temperature (°C), relative humidity (%) and rainfall (mm) during the 2013/14, 2014/15 and 2015/16 sunflower growing seasons. The duration of each growing was approximately 130 days from planting to harvesting period. Information on temperature, relative humidity and rainfall was obtained from Agrometeorology (2015)

Table S2: GenBank accession number of the *Alternaria* isolates recovered from symptomatic sunflower leaves in surveyed cultivar trials and farmers sunflower production areas in South Africa during the 2012/13, 2013/14 and 2014/15 growing seasons and used for phylogenetic analysis as reported by Kgatle *et al.* (2018).

Species name	Locality	*PPRI number	**ITS	GPD	TEF	RBP2	Alt a1
<i>A. arborescens</i> species complex	South Africa	11433	MF381794	MF381768	MF381820	MF381846	MF381742
<i>A. alternata</i>	South Africa	13462	MF381795	MF381769	MF381821	MF381847	MF381743
<i>A. alternata</i>	South Africa	13464	MF381796	MF381770	MF381822	MF381848	MF381744
<i>A. alternata</i>	South Africa	13467	MF381797	MF381771	MF381823	MF381849	MF381745
<i>A. alternata</i>	South Africa	13468	MF381798	MF381772	MF381824	MF381850	MF381746
<i>A. alternata</i>	South Africa	13471	MF381799	MF381773	MF381825	MF381851	MF381747
<i>A. alternata</i>	South Africa	13473	MF381800	MF381774	MF381826	MF381852	MF381748
<i>A. alternata</i>	South Africa	13476	MF381801	MF381775	MF381827	MF381853	MF381749
<i>A. alternata</i>	South Africa	13478	MF381802	MF381776	MF381828	MF381854	MF381750
<i>A. alternata</i>	South Africa	13484	MF381803	MF381777	MF381829	MF381855	MF381751

*Accession number of the National Collection of Fungi at the Agricultural Research Council–Plant Protection Research, Roodeplaat, Pretoria, South Africa. **The following gene regions were used during the phylogenetic analysis, transcribed spacer regions (ITS), RNA polymerase second largest subunit (RBP2), glyceraldehyde-3-phosphate dehydrogenase (GPD), translation elongation factor (TEF) and *Alternaria* allergen gene (Alt a1)