

**Table S1.** Distribution of Net Blotch disease in Israel by site, barley species and ecogeographic membership. The sampling was taken in the years 2015–2017.

Name	Species	Latitude	Longitude	Cluster Membership
ALONEY HABASHAN	H.S	33.04540278	35.8340472	1
ALUMIM	H.S	31.45102778	34.5173889	2
BEIT DAGAN	H.V	31.99410278	34.8190194	4
EL H'HAR	H.G	31.74788889	35.0445556	1
GAN YAVNNE	H.S	31.78433333	34.70325	4
GAT V	H.S+H.V	31.63005556	34.7985	2
GILAT G	H.G	31.33508333	34.6646667	2
GIMZU	H.S	31.95255556	34.94	5
HARISH	H.S	32.460628	35.048189	3
HARUVIT FOREST	H.S	31.72727778	34.8706389	5
K.MASARIK	H.V	32.89333333	35.1008333	3
KATZIR	H.S	32.484929	35.110856	3
KISUFIM	H.S+H.V	31.37805556	34.3833611	2
MEYTZAR	H.S	32.76644444	35.7337222	1
MITZPE ILAN	H.S	32.460279	35.069079	3
MODIEIN	H.S	31.87222222	35.0086111	5
NETIV HA'LAMED HE	H.S	31.67263889	35.0511389	1
NAHAL RAZ	H.S	32.57680556	35.0866111	3
RISHON LETZION	H.S	31.97693611	34.7885111	4
SHTULIM	H.S+H.V	31.78210556	34.6736944	4
TIMRAT	H.S	32.69905556	35.2141111	5
TIVON	H.S	32.75388889	35.1270556	3
RAMOT MENASHE	H.S+H.V	32.59836111	35.0634722	3
ALMAGOR S	H.S	32.91686111	35.6010833	6
ALMAGOR S	H.S+H.B	32.90327778	35.5998889	6
ALONEY ABA	H.S	32.733	35.1683333	3
ALONEY KADIMA	H.S	32.28852778	34.9282778	3
AMIAD	H.S	32.91333333	35.5431944	6
BEERI	H.S+H.V	31.42886111	34.4747778	2
BEIT HANAN G	H.G	31.93611111	34.7544444	4
BEIT HANAN S	H.S	31.93361111	34.7527778	4
BEIT HASHITA	H.S	32.54475	35.4311667	6
BEIT KAMA	H.S+H.V	31.45327778	34.7665556	2
BEIT KESHET	H.S	32.72361111	35.41	5
BEIT SHEMESH	H.S	31.75138889	35.0006944	5
BIKAAT HASHITA	H.S	32.55083333	35.4069444	6
BINYAMINA	H.S	32.51805556	34.9579167	3
BIZARON	H.S	31.79561111	34.7301389	4
DALYA	H.S	32.58775	35.0665556	3
DAMOON	H.S+H.B	32.89944444	35.1386111	3
EYN HAEMEK	H.S	32.63441667	35.0841667	3
FAHEM	H.S	32.38555556	35.1665278	3
GAN YAOSHIYA	H.G	32.34461111	34.9899444	3
GAT B	H.S+H.V+H.G	31.631	34.7978056	2
GEFEN S	H.S	31.74638889	34.8708611	5
GEFEN V	H.V	31.74638889	34.8708611	5
GILAT V	H.V	31.33580556	34.6649444	2
GIVAT HAMORE	H.B	32.61833333	35.3686111	5
GIVAT HAMORE	H.S	32.62055556	35.3372222	5
GIVA'T HATURMUSIM	H.S	32.55083333	35.4069444	6
GONEN	H.S+H.V	33.12097222	35.6421389	6
HAD HALOM	H.S	31.78061111	34.67025	4
HAMAT GADER	H.S+H.G	32.68479167	35.6670139	6

HAR GIBORIM	H.S+H.G	32.53208333	35.3641667	5
HATAYASIM MOUNTAIN	H.G	31.774175	35.09	1
HAZOREA	H.S	32.63441667	35.0841667	3
K. HAROSHET	H.S	32.69416667	35.1086111	3
KAHAL	H.S+H.B	32.88675	35.5100278	6
KFAR DANIEL	H.S+H.G+H.B	31.93375	34.93225	5
KIRYAT TIVON-PESEL ZAID	H.G	32.70116667	35.1278889	3
LAHAV FOREST	H.S+H.G	31.365	34.8505556	1
MALAHIM FOREST	H.B	31.59841667	34.8353611	2
MAPALIM JUNCTION	H.S	32.98611111	35.7503611	1
MITZPE HAREL	H.S+H.B	31.80200278	34.9604083	5
MITZPE VINIA	H.S+H.G	32.52472222	35.3875	5
MODIEIN	H.G	31.87658333	35.0096111	5
MOSHAV PATISH	H.G	31.33105556	34.5503333	2
MOTZA EILIT	H.B	31.79555556	35.1505556	1
NAHAL ETZIONA	H.G	31.67447222	35.0210833	5
NAHAL GRAR	H.S+H.G	31.37922222	34.6158889	2
NAHAL KATLAV	H.S	31.73677778	35.0785278	1
NAHAL LAKISH	H.S+H.V	31.77766667	34.6692222	4
NAHAL SHIKMA	H.S	31.48672222	34.7098611	2
NETIVOT	H.S	31.43252778	34.5851389	2
NEVE MICHAEL	H.S	31.670546	35.007188	5
NIRIM	H.V	31.3395	34.3836667	2
PURA	H.B	31.49538889	34.7761944	2
RAMAT YOHANAN	H.V	32.79852778	35.1249167	3
RUHAMA	H.S	31.48672222	34.7098611	2
SHANI LIVNA	H.S+H.B	31.35397222	35.0765083	1
SHATA	H.S	32.5485	35.4149167	6
SUFA	H.S	33.03502778	35.6908056	1
TAL EL	H.S	32.92511111	35.1725	3
TAU	H.S	32.11430556	34.8058056	4
TEL ARAD	H.V	31.25691667	35.1186528	1
TIDHAR	H.S+H.B	31.37922222	34.6158889	2
TIMRAT	H.G+HB	32.70111111	35.2152778	5
TIVON	H.S	32.70388889	35.1270556	3
TIVON	H.G	32.71186111	35.1522222	3
TZOMET YHUDIYA	H.S	32.90325	35.6470833	6
YATIR FOREST	H.S+H.B	31.34697222	35.0308056	1
ZORAA FOREST-TARUM	H.S+H.B	31.78383333	34.9775278	5

Marked examples, indicate sites that *ptt/ptm* isolate was isolated from the sample. The cluster membership is based on the ecogeographic characterises

**Table S2.** Summary of the mean value of the eco-geographic variable.

Eco-Geographic Group	N Rows	Average Wind January-March	Average Solar Radiation Jan-Mar	Precipitation of Coldest Quarter	Temperature of Coldest Quarter	Temperature Annual Range
1	13	2.160 ± 0.033 **	6.753 ± 0.089 **	1.05 ± 0.084 **	1.495 ± 0.047 *	3.625 ± 0.026 ***
2	17	2.371 ± 0.043 ***	7.156 ± 0.012 ***	0.726 ± 0.031 *	1.880 ± 0.008 **	3.287 ± 0.033 *
3	22	2.373 ± 0.020 ***	6.452 ± 0.019 *	1.307 ± 0.025 ***	1.848 ± 0.017 **	3.248 ± 0.015 *
4	10	2.536 ± 0.023 ****	6.909 ± 0.026 **	1.265 ± 0.040 **/***	1.921 ± 0.01 ***	3.235 ± 0.013 *

5	19	2.166 ± 0.026 **	6.756 ± 0.053 **	1.156 ± 0.026 **/**	1.825 ± 0.013 **	3.461 ± 0.013 **
6	11	1.886 ± 0.032 *	6.446 ± 0.034 *	1.048 ± 0.039 **	1.923 ± 0.01 ***1	3.772 ± 0.030 ****

\*, \*\*, \*\*\*, and \*\*\*\* are represent significant differences between each group and tested in Wilcoxon method ( $P < 0.05$ )

**Table S3.** Aggressiveness of *Pyrenophora teres* isolates on detached leaves and saprophytic.

Isolate Name	Barke	Sagiv	Ma'anit	Noga	Saprophytic *
HS-MA-TI	0.399 A	0.311 AB	0.316 A	0.295 A	0.627 ABC
HS-MA-ME	0.330 AB	0.305 AB	0.288 ABC	0.265 AB	0.667 ABC
HS-MA-RM	0.292 ABC	0.303 AB	0.291 AB	0.234 ABC	0.582 ABC
HS-MA-NR	0.329 AB	0.282 ABC	0.288 AB	0.227 ABC	0.589 ABC
HS-MA-GY	0.286 ABC	0.198 A BCDE	0.214 ABCDEF	0.208 ABCD	0.581 ABC
HG-TE-EH	0.196 ABCD	0.189 A BCDE	0.136 BCDEFGH	0.207 ABCD	0.580 ABC
HS-MA-RI	0.310 ABC	0.236 ABCD	0.222 ABCDE	0.194 ABCD	0.559 ABC
HS-MA-NM	0.306 ABC	0.281 ABC	0.241 ABCD	0.183 ABCD	0.680 AB
HV-TE-G A	0.216 ABCD	0.160 CDEF	0.136 BCDEFGH	0.165 ABCDE	0.409 BCDE
HS-TE-MO	0.189 ABCD	0.141 CDEF	0.088 FGHI	0.164 ABCDE	0.391 CDEF
HV-TE-NRM	0.190 ABCD	0.153 BCDEF	0.085 GHI	0.147 BCDE	0.576 ABC
HV-MA-BD2	0.214 ABCD	0.191 ABCDE	0.132 ABCDEFGH	0.140 BCDE	0.575 ABC
HG-MA-GIL	0.121 CD	0.086 DEF	0.093 DEFGHI	0.138 BCDE	0.413 BCDE
HS-TE-MI	0.211 ABCD	0.180 BCDEF	0.122 DEFGH	0.130 BCDE	0.526 ABCD
HV-MA-KM	0.195 ABCD	0.183 ABCDE	0.137 A BCDEFGH	0.129 BCDE	- **
HV-TE-ERM	0.180 ABCD	0.147 BCDEF	0.086 EFGHI	0.125 BCDE	0.264 DEF
HS-TE-HAR	0.208 ABCD	0.387 A	0.220 A BCDEFG	0.123 BCDE	0.502 ABCD
HS-TE-AL	0.205 ABCD	0.192 A BCDE	0.115 CDEFGH	0.122 BCDEF	0.702 AB
HS-MA-KI	0.176 ABCD	0.109 CDEF	0.081 GHI	0.121 BCDEF	0.606 ABC
HS-TE-KT	0.177 ABCD	0.125 BCDEF	0.109 EFGH	0.106 CDEF	0.719 A
HS-TE-AH	0.139 ABCD	0.286 ABC	0.128 ABCDEFGHI	0.104 CDEF	0.517 ABCD
HS-MA-GIM	0.163 BCD	0.127 BCDEF	0.132 ABCDEFGH	0.100 CDEF	0.454 A BCDE
HV-MA-BD1	0.166 BCD	0.129 BCDEF	0.113 DEFGH	0.079 DEF	0.598 ABC
HS-TE-KA	0.167 BCD	0.130 BCDEF	0.077 GHI	0.077 DEF	0.658 ABC
HS-TE-SH	0.110 CD	0.076 EF	0.079 GHI	0.052 EF	0.124 F
HS-TE-NH	0.119 CD	0.059 EF	0.046 HI	0.04 EF	0.550 ABCD
HS-TE-HA	0.056 D	0.032 F	0.028 I	0.015 F	0.180 EF

Different letters differ significantly, as determined by Tukey's highly significant difference test, at  $P < 0.05$ . \*Correlation between rate of progress on detached leaves and saprophytic medium were tested by Pearson correlation coefficient and found significant ( $r=0.681$ ,  $P < 0.0001$ ). \*\*The isolates showed high difference between the replicate due to differences in freshness of the agar plate.