Table 1: List of cases of SDHI resistant fungal plant pathogen species, their origin, and mutations found conferring SDHI resistance. Letter codes given for species are used in Table 2. Table reflects the list published on the FRAC webpage (status July 2014) with some updates based on BASF, unpublished data.

Species name		Reported from host	Origin	Resistance mechanism (Subunit-mutation)	Reference
Ustilago maydis	a	(Laboratory)	Lab	B-H257L	1
Aspergillus oryzae	b	(Laboratory)	Lab	B-H249Y/L/N, C-T90I, D-D124E	7
Zymoseptoria tritici	c	(Laboratory)	Lab	B-N225I, B-H267Y/R/L, B-I269V, C-A84V, C-H152R, C-T79I, C-N86K, C-G90R, D-H129E, and several others	2-6
Zymoseptoria tritici	d	Wheat	Field	B-N225T, C-T79N, C-W80S, C-N86S	12
Pyrenophora teres	e	Barley	Field	B-H277Y, C-N75S, C-G79R, C-H134R, C-S135R, D-D124N/E, D-H134R, D-D145G	16
Botrytis cinerea	f	various	Field	B-P225L/T/F, B-H272Y/R/L/V, B-N230I, D-H132R, C-A85V	8-11
Botrytis elliptica	g	Lillies	Field	B-H272Y/R	12
Alternaria alternata	h	Pistachio	Field	B-H277Y/R, C-H134R, D-D123E, D-H133R	13-15
Alternaria solani	i	Potatoes	Field	B-H277Y/R, D-H133R	12
Corynespora cassiicola	j	Cucurbits	Field	B-H278Y/R, C-S73P, D-S89P, D-G109V	17-18
Didymella bryoniae	k	Cucurbits	Field	B-H277R/Y	12, 19
Podosphaera xanthii	l	Cucurbits	Field	B-H->Y (homologous to H272 in *B. cinerea*)	12
Sclerotinia sclerotiorum	m	Oilseed rape	Field	B-H273Y, C-H146R, D-H132R	5, 12, 20
Stemphylium vesicarium	n	Asparagus	Field	B-P225L, H272Y/R	12
Venturia inaequalis	o	Apple	Field	C-H151R	12

Table 2: Amino acids in the different SDH subunits which were found to be exchanged and to influence SDHI sensitivity (first column). Homologous position (number) in different species (letter codes see table 1) is given in the second column. *For example:* the proline at position 220 in subunit B in *Z. tritici* (c) is homologous to the proline at position 225 *in B. cinerea* (f) and *S. vesicarium* (n).

Amino acid	Homologous positions
B-Proline	220c, 225f,n
B-Histidine	257a, 249b, 267c, 277e,h,I,k, 272f,g,n, 278j
B-Asparagine	225c, 230f
C-Alanine	84c, 85f , also homologous position to S73 in *C. cassiicola*
C-Asparagine	86c, 75e
C-Glycine	90c, 79e
C-Histidine	145c, 134e,h, 146m
C-Histidine	152c, 151o
D-Asparagine acid	124e, 123h
D-Histidine	118c, 132f,m, 134e, 133h

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SDHI Working Group

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