

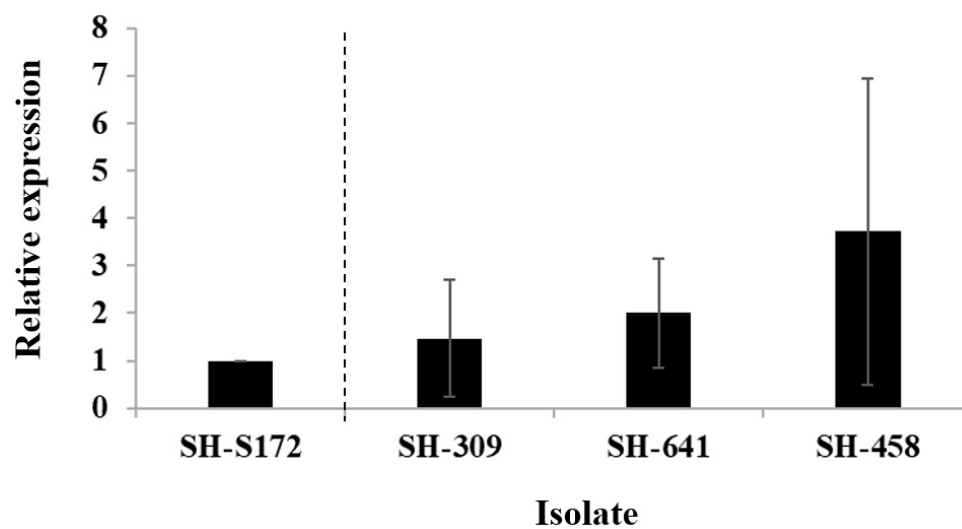


Figure S1. Relative expression of the *atrB* gene in three fludioxonil-resistant isolates and one representative sensitive isolate. The transcript levels of the *atrB* gene in fludioxonil-resistant isolates are shown relative to the sensitive one (SH-S172), which was assigned a value of 1.0. Values represent the mean $\pm$ SD of two biological replicates.

SH-S94.txt	MEDSTIAHTTALQTLALSSIDLPLTNVYGNKIRLPAGDAAKIALERELAAALVSRVQRLARAITVNNQTLFCTFNLGAFSAFADVLTGAFSRAKSS	100
SH-458.txt	MEDSTIAHTTALQTLALSSIDLPLTNVYGNKIRLPAGDAAKIALERELAAALVSRVQRLARAITVNNQTLFCTFNLGAFSAFADVLTGAFSRAKSS	100
SH-473.txt	MEDSTIAHTTALQTLALSSIDLPLTNVYGNKIRLPAGDAAKIALERELAAALVSRVQRLARAITVNNQTLFCTFNLGAFSAFADVLTGAFSRAKSS	100
SH-714.txt	MEDSTIAHTTALQTLALSSIDLPLTNVYGNKIRLPAGDAAKIALERELAAALVSRVQRLARAITVNNQTLFCTFNLGAFSAFADVLTGAFSRAKSS	100
SH-517.txt	MEDSTIAHTTALQTLALSSIDLPLTNVYGNKIRLPAGDAAKIALERELAAALVSRVQRLARAITVNNQTLFCTFNLGAFSAFADVLTGAFSRAKSS	100
Consensus	medstiahttaltqlalssidlpltnvygnkirlpgdaaekialerelaaalvsrvqrlaraitvnnqtlpctfnelgafsafadvltgafsaaks	
SH-S94.txt	TTSRQQLVNSLLAAREAFPTGGRRFFPKSTKLSDEEALREHVDHQSKQLDSQKSELAGVHAQLFECKQRCEALNVLEVERVAALEREKKHQANEAFQ	200
SH-458.txt	TTSRQQLVNSLLAAREAFPTGGRRFFPKSTKLSDEEALREHVDHQSKQLDSQKSELAGVHAQLFECKQRCEALNVLEVERVAALEREKKHQANEAFQ	200
SH-473.txt	TTSRQQLVNSLLAAREAFPTGGRRFFPKSTKLSDEEALREHVDHQSKQLDSQKSELAGVHAQLFECKQRCEALNVLEVERVAALEREKKHQANEAFQ	200
SH-714.txt	TTSRQQLVNSLLAAREAFPTGGRRFFPKSTKLSDEEALREHVDHQSKQLDSQKSELAGVHAQLFECKQRCEALNVLEVERVAALEREKKHQANEAFQ	200
SH-517.txt	TTSRQQLVNSLLAAREAFPTGGRRFFPKSTKLSDEEALREHVDHQSKQLDSQKSELAGVHAQLFECKQRCEALNVLEVERVAALEREKKHQANEAFQ	200
Consensus	ttsrqqlvnsllaareaptggrrffpkstklseelalrehvdhqskqldsqksselagvhaqlfeckqrcealnvlervaaalerelkqhqaanaefq	
SH-S94.txt	KALREIGEIVTAVARGDLKKVQIHSVEMDPEITTFKRVINTMMDGLQIFSSSEVSRVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVRE	300
SH-458.txt	KALREIGEIVTAVARGDLKKVQIHSVEMDPEITTFKRVINTMMDGLQIFSSSEVSRVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVRE	300
SH-473.txt	KALREIGEIVTAVARGDLKKVQIHSVEMDPEITTFKRVINTMMDGLQIFSSSEVSRVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVRE	300
SH-714.txt	KALREIGEIVTAVARGDLKKVQIHSVEMDPEITTFKRVINTMMDGLQIFSSSEVSRVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVRE	300
SH-517.txt	KALREIGEIVTAVARGDLKKVQIHSVEMDPEITTFKRVINTMMDGLQIFSSSEVSRVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVRE	300
Consensus	kaloreigeivtavgargdlkkvqihsvemdpetitfkrvintmmdglqifsssevsrvarevgtgilggcakisgvdgtwklntnnvmaqnltdqvre	
SH-S94.txt	IASVITAVAHGDLTKIERPACGEILQLOCTINTMVDQLRTFAAEVTVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVREIAIVTAV	400
SH-458.txt	IASVITAVAHGDLTKIERPACGEILQLOCTINTMVDQLRTFAAEVTVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVREIAIVTAV	400
SH-473.txt	IASVITAVAHGDLTKIERPACGEILQLOCTINTMVDQLRTFAAEVTVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVREIAIVTAV	400
SH-714.txt	IASVITAVAHGDLTKIERPACGEILQLOCTINTMVDQLRTFAAEVTVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVREIAIVTAV	400
SH-517.txt	IASVITAVAHGDLTKIERPACGEILQLOCTINTMVDQLRTFAAEVTVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVREIAIVTAV	400
Consensus	iasvttavahgdltkierpacgeilqloctintmvdqlrtfaaevtvarevgtgilggcakisgvdgtwklntnnvmaqnltdqvriaiaivttav	
SH-S94.txt	AKGDLTKGVQAECKGEIKQLKETINSMDVCLQCFAREVTKIAREVGTGILGGCATVHCEVGTWKLNTNNVMAQNLTQDVREIAKVTAVARGDLTKK	500
SH-458.txt	AKGDLTKGVQAECKGEIKQLKETINSMDVCLQCFAREVTKIAREVGTGILGGCATVHCEVGTWKLNTNNVMAQNLTQDVREIAKVTAVARGDLTKK	500
SH-473.txt	AKGDLTKGVQAECKGEIKQLKETINSMDVCLQCFAREVTKIAREVGTGILGGCATVHCEVGTWKLNTNNVMAQNLTQDVREIAKVTAVARGDLTKK	500
SH-714.txt	AKGDLTKGVQAECKGEIKQLKETINSMDVCLQCFAREVTKIAREVGTGILGGCATVHCEVGTWKLNTNNVMAQNLTQDVREIAKVTAVARGDLTKK	500
SH-517.txt	AKGDLTKGVQAECKGEIKQLKETINSMDVCLQCFAREVTKIAREVGTGILGGCATVHCEVGTWKLNTNNVMAQNLTQDVREIAKVTAVARGDLTKK	500
Consensus	akgdltkgvqaackgeikqlketinsmdvclqcfarevtkiarevgtgilggcatvhcevgtwklntnnvmaqnltdqvriakvttavargdltkk	
SH-S94.txt	IEVEVCGEIASLKTINTMVDRLSTFAFEVSKVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVREIAKVTAVARGDLTKK	600
SH-458.txt	IEVEVCGEIASLKTINTMVDRLSTFAFEVSKVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVREIAKVTAVARGDLTKK	600
SH-473.txt	IEVEVCGEIASLKTINTMVDRLSTFAFEVSKVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVREIAKVTAVARGDLTKK	600
SH-714.txt	IEVEVCGEIASLKTINTMVDRLSTFAFEVSKVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVREIAKVTAVARGDLTKK	600
SH-517.txt	IEVEVCGEIASLKTINTMVDRLSTFAFEVSKVAREVGTGILGGCAKISGVDGTWKLNTNNVMAQNLTQDVREIAKVTAVARGDLTKK	600
Consensus	ieevvqgeiaslktintmvdrlstfavevskvarevgtgilggcakisgvdgtwklntnnvmaqnltdqvriakvttavargdltkk	
SH-S94.txt	IIILKETINNMDRLSIFSNVQVRAKCVGVGKMGGAQVAGIGGRWKEITTEVNTMANNLTTCVRAFGDITNAATDGDFTKLITVEASGEMDELKRKI	700
SH-458.txt	IIILKETINNMDRLSIFSNVQVRAKCVGVGKMGGAQVAGIGGRWKEITTEVNTMANNLTTCVRAFGDITNAATDGDFTKLITVEASGEMDELKRKI	700
SH-473.txt	IIILKETINNMDRLSIFSNVQVRAKCVGVGKMGGAQVAGIGGRWKEITTEVNTMANNLTTCVRAFGDITNAATDGDFTKLITVEASGEMDELKRKI	700
SH-714.txt	IIILKETINNMDRLSIFSNVQVRAKCVGVGKMGGAQVAGIGGRWKEITTEVNTMANNLTTCVRAFGDITNAATDGDFTKLITVEASGEMDELKRKI	700
SH-517.txt	IIILKETINNMDRLSIFSNVQVRAKCVGVGKMGGAQVAGIGGRWKEITTEVNTMANNLTTCVRAFGDITNAATDGDFTKLITVEASGEMDELKRKI	700
Consensus	iiilketinnmdrlsifsnvqvrakvvgvgkmggaqvagiggrwkeittenvntmannlttcvrafgditnaatdgdftklitveasgemdelkrki	
SH-S94.txt	NQMVNLRDSICQNTLAREAAEFANRTKSEFLANMSHEIRTEFMNGIIGMTQTLTDLTCYCREMLNVHNLANSLLTIDDLIDLSKIEANRMIMEEIP	800
SH-458.txt	NQMVNLRDSICQNTLAREAAEFANRTKSEFLANMSHEIRTEFMNGIIGMTQTLTDLTCYCREMLNVHNLANSLLTIDDLIDLSKIEANRMIMEEIP	800
SH-473.txt	NQMVNLRDSICQNTLAREAAEFANRTKSEFLANMSHEIRTEFMNGIIGMTQTLTDLTCYCREMLNVHNLANSLLTIDDLIDLSKIEANRMIMEEIP	800
SH-714.txt	NQMVNLRDSICQNTLAREAAEFANRTKSEFLANMSHEIRTEFMNGIIGMTQTLTDLTCYCREMLNVHNLANSLLTIDDLIDLSKIEANRMIMEEIP	800
SH-517.txt	NQMVNLRDSICQNTLAREAAEFANRTKSEFLANMSHEIRTEFMNGIIGMTQTLTDLTCYCREMLNVHNLANSLLTIDDLIDLSKIEANRMIMEEIP	800
Consensus	nqmvnldrdsicqntlareaaefanrtkseflanssheirtfmgngiigmtqtltdltdltycremlnvhnlnanslltidddildlskieanrmimeeip	
SH-S94.txt	YTLRGTVFNAIKTLAVKANEKFLDLTYRVDSVPDHHVGSFRLRCVILNLVGNAINFTEHGEVSLTIQKAEQCHCAFNEYAVEFCVSDTGIGIQAEKLN	900
SH-458.txt	YTLRGTVFNAIKTLAVKANEKFLDLTYRVDSVPDHHVGSFRLRCVILNLVGNAINFTEHGEVSLTIQKAEQCHCAFNEYAVEFCVSDTGIGIQAEKLN	900
SH-473.txt	YTLRGTVFNAIKTLAVKANEKFLDLTYRVDSVPDHHVGSFRLRCVILNLVGNAINFTEHGEVSLTIQKAEQCHCAFNEYAVEFCVSDTGIGIQAEKLN	900
SH-714.txt	YTLRGTVFNAIKTLAVKANEKFLDLTYRVDSVPDHHVGSFRLRCVILNLVGNAINFTEHGEVSLTIQKAEQCHCAFNEYAVEFCVSDTGIGIQAEKLN	900
SH-517.txt	YTLRGTVFNAIKTLAVKANEKFLDLTYRVDSVPDHHVGSFRLRCVILNLVGNAINFTEHGEVSLTIQKAEQCHCAFNEYAVEFCVSDTGIGIQAEKLN	900
Consensus	ytlrgtvfnaiktlavkaneekfldltyrvdssvpdhhvgdsfrlrcvilmnlvgnainftehgevsiltikaeqchcapneyavefcvdsdtgigiqadkln	
SH-S94.txt	LIFDTFQADGSMTRKFGGTGLGLSISKRLVNLMRGCVVWKSQYKRGSSFFYFTCTVRLATSDISFIQKQLKPYGGHNVLFIDKGGTGHGKEIITMTLQIG	1000
SH-458.txt	LIFDTFQADGSMTRKFGGTGLGLSISKRLVNLMRGCVVWKSQYKRGSSFFYFTCTVRLATSDISFIQKQLKPYGGHNVLFIDKGGTGHGKEIITMTLQIG	1000
SH-473.txt	LIFDTFQADGSMTRKFGGTGLGLSISKRLVNLMRGCVVWKSQYKRGSSFFYFTCTVRLATSDISFIQKQLKPYGGHNVLFIDKGGTGHGKEIITMTLQIG	1000
SH-714.txt	LIFDTFQADGSMTRKFGGTGLGLSISKRLVNLMRGCVVWKSQYKRGSSFFYFTCTVRLATSDISFIQKQLKPYGGHNVLFIDKGGTGHGKEIITMTLQIG	1000
SH-517.txt	LIFDTFQADGSMTRKFGGTGLGLSISKRLVNLMRGCVVWKSQYKRGSSFFYFTCTVRLATSDISFIQKQLKPYGGHNVLFIDKGGTGHGKEIITMTLQIG	1000
Consensus	lifdtfqadgsmtrkfsggtglglssiskrlvnlmrqcvvwksqykgssffytctvrlatsdisfiqkqlkpyqghnvlfidkggtghgkeiitmtlqig	
SH-S94.txt	LVPVVVDSQHTILLNGNRTREKIASTYDVIVVDSIESARKLRSIDEFKYIPVLLAFVIVHSLKSALDLGITSYMTTFCPLTIDLNGMIPALENRAAFS	1100
SH-458.txt	LVPVVVDSQHTILLNGNRTREKIASTYDVIVVDSIESARKLRSIDEFKYIPVLLAFVIVHSLKSALDLGITSYMTTFCPLTIDLNGMIPALENRAAFS	1100
SH-473.txt	LVPVVVDSQHTILLNGNRTREKIASTYDVIVVDSIESARKLRSIDEFKYIPVLLAFVIVHSLKSALDLGITSYMTTFCPLTIDLNGMIPALENRAAFS	1100
SH-714.txt	LVPVVVDSQHTILLNGNRTREKIASTYDVIVVDSIESARKLRSIDEFKYIPVLLAFVIVHSLKSALDLGITSYMTTFCPLTIDLNGMIPALENRAAFS	1100
SH-517.txt	LVPVVVDSQHTILLNGNRTREKIASTYDVIVVDSIESARKLRSIDEFKYIPVLLAFVIVHSLKSALDLGITSYMTTFCPLTIDLNGMIPALENRAAFS	1100
Consensus	lvppvvdseqhtillngnrtrekiastydvivvdsiesarklrsiddefkyipvllafvvhslksaldlgitsymttfcltldlgnmipalenraafs	
SH-S94.txt	LADNTKSFIDILLAEINIVNQLAVKILEKYHHVTVVGNQGEALDAIKERKDYVILMDVQMPIMGGFEATAKIREYERSLGTQRTPIALTAMHMLGORE	1200
SH-458.txt	LADNTKSFIDILLAEINIVNQLAVKILEKYHHVTVVGNQGEALDAIKERKDYVILMDVQMPIMGGFEATAKIREYERSLGTQRTPIALTAMHMLGORE	1200
SH-473.txt	LADNTKSFIDILLAEINIVNQLAVKILEKYHHVTVVGNQGEALDAIKERKDYVILMDVQMPIMGGFEATAKIREYERSLGTQRTPIALTAMHMLGORE	1200
SH-714.txt	LADNTKSFIDILLAEINIVNQLAVKILEKYHHVTVVGNQGEALDAIKERKDYVILMDVQMPIMGGFEATAKIREYERSLGTQRTPIALTAMHMLGORE	1200
SH-517.txt	LADNTKSFIDILLAEINIVNQLAVKILEKYHHVTVVGNQGEALDAIKERKDYVILMDVQMPIMGGFEATAKIREYERSLGTQRTPIALTAMHMLGORE	1200
Consensus	ladntksfidillaedinivnqlavkilekyhhvttvgnqgealdaikerkydvilmvqmpimggfeatakireyerslgtqrtpialtahamlgore	
SH-S94.txt	KCIQACMDEYLSKPLKQNLHIGTLIKCATLGGALLEKGREVRQSANEEFSNQGPRGACHFASSETFAHMRFAIEPRAYTTGFINHGSAESPSLVTAD	1300
SH-458.txt	KCIQACMDEYLSKPLKQNLHIGTLIKCATLGGALLEKGREVRQSANEEFSNQGPRGACHFASSETFAHMRFAIEPRAYTTGFINHGSAESPSLVTAD	1300
SH-473.txt	KCIQACMDEYLSKPLKQNLHIGTLIKCATLGGALLEKGREVRQSANEEFSNQGPRGACHFASSETFAHMRFAIEPRAYTTGFINHGSAESPSLVTAD	1300
SH-714.txt	KCIQACMDEYLSKPLKQNLHIGTLIKCATLGGALLEKGREVRQSANEEFSNQGPRGACHFASSETFAHMRFAIEPRAYTTGFINHGSAESPSLVTAD	1300
SH-517.txt	KCIQACMDEYLSKPLKQNLHIGTLIKCATLGGALLEKGREVRQSANEEFSNQGPRGACHFASSETFAHMRFAIEPRAYTTGFINHGSAESPSLVTAD	1300
Consensus	kciqacmdeylskplkqnlihtlikcatlggallekgrevrqsaneesfnsgprgachfassetpahmrfaieprayttgfinhgsaespslvtad	
SH-S94.txt	AEDPLARLLMRAHS	1314
SH-458.txt	AEDPLARLLMRAHS	1314
SH-473.txt	AEDPLARLLMRAHS	1314
SH-714.txt	AEDPLARLLMRAHS	1314
SH-517.txt	AEDPLARLLMRAHS	1314
Consensus	aedplarllmrahs	

Figure S2. Alignment of Bos1 protein sequences from different *Botrytis cinerea* isolates. Each type of protein sequence is indicated by one representative isolate. SH-94: without resistance related mutations, SH-458: with I365S mutation, SH-473: with I365N mutation, SH-714: with N373S mutation, SH-517: with Q369P/N373S mutations.

Table S1. Fungicides used in this study.

Fungicide	Active ingredient (a.i.)	Provider
fludioxonil	95%	Syngenta Biotechnology Co., Ltd., Shanghai, China
azoxystrobin	98%	Syngenta Biotechnology Co., Ltd., Shanghai, China
pyrimethanil	95.2%	Syngenta Biotechnology Co., Ltd., Shanghai, China
carbendazim	98%	Guangxin Agricultural Chemicals Co., Ltd, Anhui, China.
boscalid	95%	Guangxin Agricultural Chemicals Co., Ltd., Anhui, China.
fluopyram	98.8%	Guangxin Agricultural Chemicals Co., Ltd., Anhui, China.
difenoconazole	95%	Yulong Chemical Industrial Co., Ltd., Hangzhou, China.
cyprodinil	98.5%	Beijing Mindleader Agrosience Co.,Ltd., Beijing, China
iprodione	95.5%	Bayer CropScience Co., Ltd., Beijing, China.

Table S2. Sensitivity test of different fungicides.

Fungicide	Medium	Discrimination method ^a	Discriminatory concentration ($\mu\text{g/mL}$)	Reference
fludioxonil	PDA	MIC	10, 100	22
carbendazim	YG	MIC	100	23
azoxystrobin	YBA	MIC	100	24
boscalid	YBA	MIC	10	25
fluopyram	YBA	MIC	10	26
difenoconazole	YG	EC ₅₀	2.68	Unpublished data
pyrimethanil	GKMN	MIC	1	25, 27
cyprodinil	GKMN	EC ₅₀	10	28
iprodione	PDA	EC ₅₀	1	28

^a MIC means the minimum inhibitory concentration, and EC₅₀ indicates the effective concentration inhibiting 50% of colony growth.