

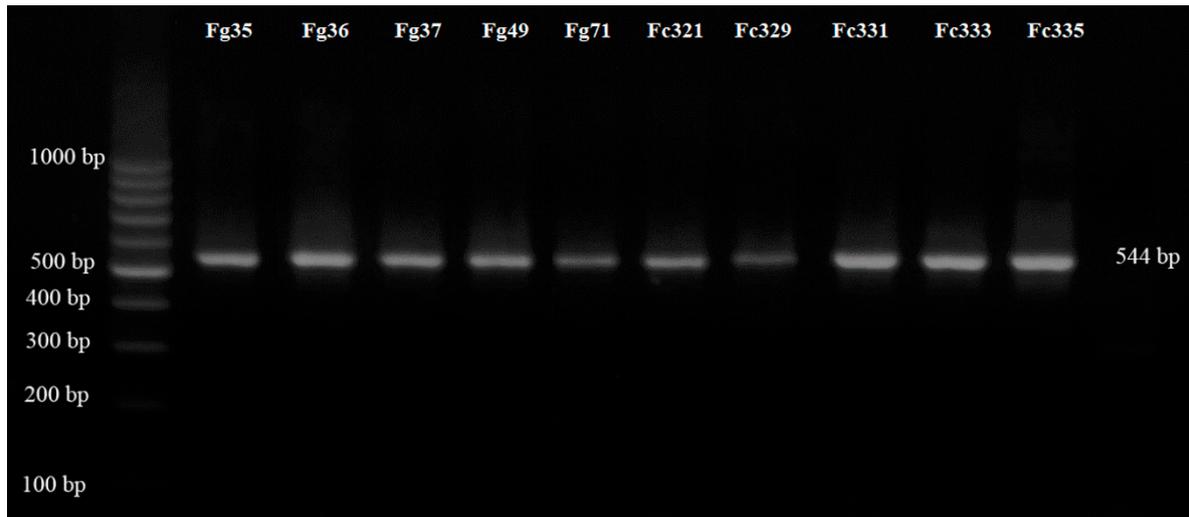
**Table S1.** Selected lines and cultivars of the genus *Triticum* with varied susceptibility to FHB.

<i>Triticum</i> Species/Line	Origin <sup>§</sup>	Susceptibility to FHB <sup>‡</sup>
<i>T. monococcum</i> ssp. <i>monococcum</i> 222 (Tmm222)	TRI	10.0
<i>T. monococcum</i> ssp. <i>monococcum</i> 168 (Tmm168)	TRI	0
<i>T. turgidum</i> ssp. <i>dicoccum</i> 57 (Td57)	TRI	15
<i>T. turgidum</i> ssp. <i>dicoccum</i> 115 (Td115)	TRI	5
<i>T. turgidum</i> ssp. <i>polonicum</i> 131 (Tp131)	TRI	25
<i>T. turgidum</i> ssp. <i>polonicum</i> 159 (Tp159)	TRI	30
<i>T. turgidum</i> ssp. <i>durum</i> cv. <i>Komnata</i>	UWM	15
<i>T. aestivum</i> ssp. <i>spelta</i> cv. <i>Wirtas</i>	UWM	0
<i>T. aestivum</i> ssp. <i>spelta</i> 208 (Ts208)	TRI	5
<i>T. aestivum</i> ssp. <i>aestivum</i> cv. <i>Sumai</i>		0
<i>T. aestivum</i> ssp. <i>aestivum</i> cv. <i>Zebra</i>	UWM	15.0

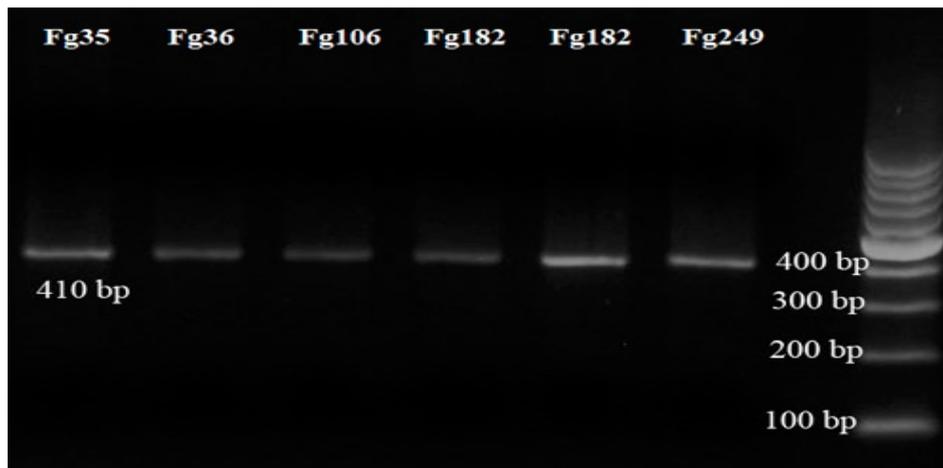
<sup>‡</sup> severity of disease in naturally infected plants in 2014-2015. percentage of spike area displaying symptoms of Fusarium head blight in hard maturity growth stage. <sup>§</sup>UWM—University of Warmia and Mazury in Olsztyn (Poland). TRI—Leibniz Institute of Plant Genetics and Crop Plant Research in Gatersleben (Germany)

**Table S2.** Sequence alignment in *Fusarium* spp. isolates from own collection and reference isolates from NCBI.

Code of <i>Fusarium</i> Isolates from Own Collection	Reference Isolates (NCBI)	Sequence Alignment [%]	References
Fg35	KX878931.1 <i>Fusarium graminearum</i>	92.9	<a href="https://figshare.com/s/2d5f82f7b6b81044e83a">https://figshare.com/s/2d5f82f7b6b81044e83a</a>
Fg37	MF800906.1 <i>Fusarium graminearum</i>	94	<a href="https://figshare.com/s/906c9156e9f014016489">https://figshare.com/s/906c9156e9f014016489</a>
Fg49	MF800906.1 <i>Fusarium graminearum</i>	91.3	<a href="https://figshare.com/s/47efb3d5ca22ca58082e">https://figshare.com/s/47efb3d5ca22ca58082e</a>
Fg74	KX421420.1 <i>Fusarium graminearum</i>	95	<a href="https://figshare.com/s/32d82463a634e66c614b">https://figshare.com/s/32d82463a634e66c614b</a>
Fg107	KU377276.1 <i>Fusarium graminearum</i>	98	<a href="https://figshare.com/s/455e73f00a94b349ce30">https://figshare.com/s/455e73f00a94b349ce30</a>
Fg249	KX421420.1 <i>Fusarium graminearum</i>	95	<a href="https://figshare.com/s/5c15caa12425d595cabc">https://figshare.com/s/5c15caa12425d595cabc</a>
Fc321	KP292806.1 <i>Fusarium culmorum</i>	94	<a href="https://figshare.com/s/0421684e56c53937960f">https://figshare.com/s/0421684e56c53937960f</a>
Fc329	AY147341.1 <i>Fusarium culmorum</i>	96	<a href="https://figshare.com/s/5972b1d226d8e648a6ec">https://figshare.com/s/5972b1d226d8e648a6ec</a>
Fc31	KX349468.1 <i>Fusarium culmorum</i>	92.51	<a href="https://figshare.com/s/fd2bc45c94144009436f">https://figshare.com/s/fd2bc45c94144009436f</a>
Fc32	KT318585.1 <i>Fusarium culmorum</i>	95.68	<a href="https://figshare.com/s/1ac95680a4645425afad">https://figshare.com/s/1ac95680a4645425afad</a>
Fc61	MF372583.1 <i>Fusarium culmorum</i>	98.34	<a href="https://figshare.com/s/22b4480f33c2e547dc1e">https://figshare.com/s/22b4480f33c2e547dc1e</a>
Fc62	KT992460.1 <i>Fusarium culmorum</i>	96.28	<a href="https://figshare.com/s/acf13e7b804697e8dfe4">https://figshare.com/s/acf13e7b804697e8dfe4</a>
Fp21	KP271956.1 <i>Fusarium poae</i>	97.78	<a href="https://figshare.com/s/be0a38f9a75079c179e0">https://figshare.com/s/be0a38f9a75079c179e0</a>
Fp22	GU480965.1 <i>Fusarium poae</i>	97.01	<a href="https://figshare.com/s/48b9f5d4adbd17669057">https://figshare.com/s/48b9f5d4adbd17669057</a>
Fp48	AF414967.1 <i>Fusarium poae</i>	96.27	<a href="https://figshare.com/s/0fdf3bf786c5740b1883">https://figshare.com/s/0fdf3bf786c5740b1883</a>
Fp206	KF889085.1 <i>Fusarium poae</i>	95.16	<a href="https://figshare.com/s/078d7f7e2825b26306ea">https://figshare.com/s/078d7f7e2825b26306ea</a>
F153	AB587023.1 <i>Fusarium langsethiae</i>	91.42	<a href="https://figshare.com/s/d9f36d59421357491e09">https://figshare.com/s/d9f36d59421357491e09</a>
F187	NR.121214.1 <i>Fusarium langsethiae</i>	90.3	<a href="https://figshare.com/s/866e93f7cceb7ce87645">https://figshare.com/s/866e93f7cceb7ce87645</a>
F1130	AF414969.1 <i>Fusarium langsethiae</i>	91.74	<a href="https://figshare.com/s/eb5468f2ed36900b01b7">https://figshare.com/s/eb5468f2ed36900b01b7</a>
Fa9	KT362194.1 <i>Fusarium avenaceum</i>	90.15	<a href="https://figshare.com/s/25248245872ba8c079b2">https://figshare.com/s/25248245872ba8c079b2</a>
Feq3	MF166765.1 <i>Fusarium equiseti</i>	97.5	<a href="https://figshare.com/s/643e8ff0b7180b3b0e18">https://figshare.com/s/643e8ff0b7180b3b0e18</a>
Feq25	KR094440.1 <i>Fusarium equiseti</i>	99.62	<a href="https://figshare.com/s/93560d66b4b4556098d5">https://figshare.com/s/93560d66b4b4556098d5</a>
Feq36	KU680356.1 <i>Fusarium equiseti</i>	97.94	<a href="https://figshare.com/s/28dc85ea0b8e80da4947">https://figshare.com/s/28dc85ea0b8e80da4947</a>
Feq37	KU680356.1 <i>Fusarium equiseti</i>	97.91	<a href="https://figshare.com/s/fb0734ee0173daa06027">https://figshare.com/s/fb0734ee0173daa06027</a>
Fd13	KX270351.1 <i>Fusarium dimerum</i>	90.91	<a href="https://figshare.com/s/c8f98ae292df6b6e93d40">https://figshare.com/s/c8f98ae292df6b6e93d40</a>



**Figure S1.** Gel image after electrophoresis. EtBr was added to the gel before electrophoresis to visualize products with the expected size of 544 bp. Line 1: 100–1000 bp marker. all lines- exemplary *F.culmorum* and *F. graminearum* isolates with the *Tri5* gene marker.



**Figure S2.** Gel image after electrophoresis. EtBr was added to the gel before electrophoresis to visualize products with the expected size of 410 bp. Lines 1–6: exemplary *F. graminearum* isolates with the *Tri12* gene producing 3-ADON. Line 7: 100–1000 bp marker.