

## Express PRA for *Magnaporthe oryzae*

## – Research and breeding –

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**Initiation:** Request for an Express-PRA by the plant protection service of Lower Saxony due to an application on the movement and use of the organism for research and breeding purposes.

Express-PRA	<i>Magnaporthe oryzae</i> B.C. Couch
<b>Phytosanitary risk for Germany</b>	<p><i>Magnaporthe oryzae</i> is already present in several EU-Member States and thus does not qualify as a quarantine pest.</p> <p>Nevertheless, <i>M. oryzae</i> has a considerable damage potential for the production of rice and can also infest wheat, barley and other weeds. It is not yet widespread.</p>
<b>Phytosanitary risk for EU-MS</b>	
<b>Certainty of assessment</b>	
<b>Conclusion</b>	<p>So far, the fungus <i>Magnaporthe oryzae</i> is not present in Germany but it already occurs in other EU-Member States. It is listed neither in the annexes of Directive 2000/29/EG nor by the EPPO.</p> <p><i>M. oryzae</i> has a considerable damage potential for rice, barley, wheat, lolium and other weeds.</p> <p>Presumably, <i>M. oryzae</i> will not be able to establish outdoors in Germany due to unsuitable climate conditions but the spread to southern EU-Member States is possible.</p> <p>Thus, <i>M. oryzae</i> is not classified as a quarantine pest and § 4a of the Plant Inspection Order does not apply. It is a dangerous pathogen and thus, measures for the prevention of the release of this fungus should be recommended, including the use of good laboratory practice and the inactivation of the pathogen after the completion of the trials.</p>
<b>Preconditions for an Express-PRA fulfilled?</b>	Could be a pest, it is not listed and has thus far is not established in the area covered by the reporting Plant Protection Service.
<b>Taxonomy, trivial name, synonyms</b>	Fungi, Ascomycota, Sordariomycetes, Magnaporthaceae, <i>Magnaporthe oryzae</i> B.C. Couch
<b>Does a relevant earlier PRA exist?</b>	No, only one risk assessment as donor and recipient organism for genetic engineering by the Federal Office for Consumer Protection (BVL 2008) is available, see below.
<b>Distribution and biology</b>	According to CABI CPC (2017), the fungus apparently is present in all countries where rice is commercially cultivated. In the EU it is present in Bulgaria, France, Greece, Italy, Portugal, Rumania, Hungary and Spain.

Express-PRA	<i>Magnaporthe oryzae</i> B.C. Couch
<b>Are host plants present in the PRA-area? If so, which?</b>	Yes, widespread for example <i>Eleusine coracana</i> , <i>Hordeum vulgare</i> (barley), <i>Lolium perenne</i> , <i>Oryza glaberrima</i> , <i>Oryza longistaminata</i> , <i>Oryza sativa</i> (rice), <i>Triticum aestivum</i> (wheat)
<b>Is a vector needed/further plant for host alternation? Which? Distribution?</b>	No
<b>Climate in the distribution area comparable with PRA area?</b>	Not in Germany, but in southern EU-MS.
<b>If no, are there host plants in protected cultivation?</b>	Not relevant.
<b>Damage to be expected in the PRA-area?</b>	Presumably not under actual climatic conditions.
<b>Remarks</b>	In the case of movement and use of the organism the prevention of the release must be guaranteed.  Remark: according to the Genetic Technology Safety Regulations (GenTSV) and according to BVL (2007) the fungus is classified as donor and recipient organism for genetic engineering in risk group 1.
<b>Literature</b>	BVL (2007). Stellungnahme der ZKBS zu Kriterien der Bewertung und der Einstufung von Pflanzenviren, phytopathogenen Pilzen und phytopathogenen Bakterien als Spender- und Empfängerorganismen für gentechnische Arbeiten (Ref no.: 6790-10-53, April 2007).  BVL (2008). Stellungnahme der ZKBS zur Risikobewertung von <i>Magnaporthe grisea</i> und <i>Magnaporthe oryzae</i> gemäß § 5 Absatz 1 GenTSV (Ref no.: 6790-05-03-43, May 2008).  CABI CPC (2017). Datasheet on <i>Magnaporthe oryzae</i> . <a href="http://www.cabi.org/cpc/datasheetreport?dsid=46103">http://www.cabi.org/cpc/datasheetreport?dsid=46103</a> . (accessed on 30-05-2017).