



## Quick scan number: QS 416 Mycology

Quick scan date: 05-12-2013		
1	What is the scientific name ( if possible up to species level + author, also include (sub)family and order) and English/common name of the organism? <i>Add picture of organism/damage if available and publication allowed.</i>	<i>Peronospora belbahrii</i> , downy mildew
2	What prompted this quick scan? <i>Organism detected in produce for import, export, in cultivation, nature, mentioned in publications, e.g. EPPO alert list, etc.</i>	This downy mildew pathogen was found in an import consignment of <i>Ocimum basilicum</i> , sweet basil cut leaves originating in Kenya
3	What is the (most likely) area of distribution?	The organism may originate from Africa, but is now found almost worldwide including several European countries (1).
4	Has the organism been detected, sighted and/or has it established itself in nearby countries (DE, BE, LU, FR, UK) <i>Yes/no. If 'yes', provide details. No interceptions</i>	Yes, there are records from UK, Switzerland and Germany (1,2)
5	Does the organism cause any kind of plant damage in the current area of distribution and/or does the consignment demonstrate damage suspected to have been caused by this organism? <i>Yes/no + host plants + short explanation of symptoms. Please indicate also when the organism is otherwise harmful (e.g. predator, human/veterinary pathogen vector, etc.).</i>	Yes, apart from <i>Ocimum</i> , <i>Agastache</i> and <i>Solenostemon</i> are reported as hosts for <i>Peronospora belbahrii</i> (1) This organism is a downy mildew, that causes leaf infections, which can finally lead to death of plants.  In a rapid risk assessment for the UK, Fera (2) assessed: "Medium losses are likely for producers of sweet basil, coleus and <i>Agastache</i> ".

6	<p>Indicate the (provisional) probability of establishment of the organism in the Netherlands regarding climate and ecology.</p> <ol style="list-style-type: none"> <li>In greenhouses (low, medium, high)</li> <li>Outdoors (low, medium, high)</li> <li>Otherwise (e.g. storage facilities, human environment)</li> </ol> <p><i>Please illustrate with information/references</i></p>	<p>In the UK, several findings were reported in commercial nurseries, on sweet basil and <i>Agastache</i>. One of the <i>Agastache</i> findings was in plants that originated in NL (2). Regarding the climate and ecology, the probability of establishment both in greenhouses and outdoors is medium to high.</p>
7	<p>If the organism would become established in the Netherlands, what kind of damage would it likely cause ?</p> <p><i>Indicate whether damage is expected to be comparable or different to that in area of present distribution : see question 5.</i></p>	<p>Once established, the damage would be comparable to the damage in the present area of distribution.</p>
8	<p>Which commercially grown host plants are present and which host plants are present in the natural environment in the Netherlands?</p> <p><i>If establishment is restricted to greenhouse climate, list only host plants in greenhouses.</i></p>	<p><i>Ocimum, Solenostemon and Agastache</i> are commercially grown in NL</p>
9	<p>Provide a provisional estimation of type and probable amount of direct and indirect economic damage (e.g. lower quality, lower production, export restrictions, threat to biodiversity, etc.) likely to occur if the organism would become established?</p>	<p>Direct damage would be lower production and lower quality. The organism is already widespread, and therefore no export restrictions are to be expected.</p>
10	<p>What are the possibilities of spreading, either by natural dispersal or human activity?</p>	<p><i>Peronospora belbahri</i> sporangia are windborne, they can be transported over longer distances. The pathogen can also be spread on diseased plant material.</p>
11	<p>In what manner could the organism enter the Netherlands? <i>Mention pathways.</i></p>	<p>- on imported diseased plant material, plants for planting, ornamentals or herbs -seed, <i>P. belbahri</i> is seedborne</p>
12	<p>Has the organism been detected on/in a product (cut flowers, fruit...) destined for the consumer market?</p> <p><i>If "no", please go to question 14</i></p>	<p>Yes</p>
13	<p>If the organism has been found on/in product other than plants for planting (e.g. cut flowers, fruit,</p>	<p>The product is meant for consumption and there is a low risk that the pathogen could spread from discarded diseased material to a suitable host.</p>

	vegetables), are there any risks of introduction and establishment in crop areas and/or natural environment in the Netherlands?	
14	Additional remarks	
15	References:	<p>1 'Identity of the downy mildew pathogens of basil, coleus and sage with implications for quarantine measures', Mycological Research 113(2009) 532-540</p> <p>2. Rapid assessment of the need for a detailed Pest Risk Analysis for <i>Peronospora belbahri</i> (Fera, June 14th 2012)</p>
16	<b>Conclusions</b>	This Quick scan concerns a downy mildew pathogen, <i>Peronospora delbahri</i> , found on imported produce from Africa. In the Netherlands, the pathogen can potentially cause yield losses in the commercial production of <i>Ocimum</i> , <i>Agastache</i> and <i>Solenostemon</i> . The pathogen has been reported from various continents and is known to be present in several European countries and may be present in more countries than currently known.
17	<b>Follow-up measures</b>	No specific measures