

Table S4: Common pathogens causing vascular stain on pines in European forest stands

Pathogen name	Country of detection	Host species	References
<i>Biscogniauxia mediterranea</i> (De Not.) Kuntze	Spain	<i>P. sylvestris</i>	1
<i>Cenangium ferruginosum</i> Fr.	Lithuania	<i>P. sylvestris</i>	2
<i>Ceratocystis brunneocrinita</i> E.F. Wright & Cain	Spain	<i>P. pinaster</i>	3
<i>Ceratostomella comate</i> V.V. Mill. & Tcherntz.	Romania	<i>P. nigra</i> , <i>P. sylvestris</i>	4
<i>Fusarium sporotrichioides</i> Sherb.	Lithuania	<i>P. mugo</i>	5
<i>Graphilbum cf. rectangulosporium</i> Graphilbum rectangulosporium (Ohtaka, Masuya & Yamaoka) Z.W. de Beer & M.J. Wingf.	Ukraine	<i>P. sylvestris</i>	6
<i>Graphium</i> Corda	Poland, Ukraine	<i>P. sylvestris</i>	7, 8
<i>Gremmeniella abietina</i> (Lagerb.) M. Morelet	France, Ukraine	<i>P. sylvestris</i>	9, 10
<i>Grosmannia olivacea</i> (Math.-Käärik) Zipfel, Z.W. de Beer & M.J. Wingf.	Ukraine	<i>P. sylvestris</i>	8
<i>Coniochaeta hoffmannii</i> (J.F.H. Beyma) Z.U. Khan, Gené & Guarro	Lithuania	<i>P. mugo</i>	5
<i>Leptographium guttulatum</i> M.J. Wingf. & K. Jacobs	Italy	<i>P. pinaster</i> <i>P. pinea</i>	11
<i>Leptographium lundbergii</i> Lagerb. & Melin	Italy, Poland	<i>P. pinaster</i> <i>P. pinea</i> , <i>P. sylvestris</i>	7, 11
<i>Leptographium procerum</i> (W.B. Kendr.) M.J. Wingf.	Lithuania, Poland	<i>P. mugo</i> , <i>P. sylvestris</i>	5, 7, 12

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<i>Leptographium serpens</i> (Goid.) M.J. Wingf.	Italy	<i>P. pinaster</i> , <i>P. pinea</i>	11
<i>Leptographium Lagerb. & Melin</i>	France, Switzerland	<i>Pinus halepensis</i> , <i>P. sylvestris</i>	13, 14
<i>Leptographium wingfieldii</i> M. Morelet	Italy, Poland	<i>P. pinaster</i> <i>P. pinea</i> , <i>P. sylvestris</i>	7, 11
<i>Ophiostoma bicolor</i> R.W. Davidson & D.E. Wells	Ukraine	<i>P. sylvestris</i>	6
<i>Ophiostoma brunneociliatum</i> Math.-Käärik	France, Italy	<i>P. sylvestris</i>	15, 16
<i>Ophiostoma canum</i> (Münch) Syd. & P. Syd.	Ukraine	<i>P. sylvestris</i>	6
<i>Ophiostoma fasciatum</i> (Olchow. & J. Reid) Georg Hausner, J. Reid & Klassen	Spain	<i>P. pinaster</i>	3
<i>Ophiostoma ips</i> (Rumbold) Nannf.	Italy, Spain	<i>P. sylvestris</i> , <i>P. pinaster</i>	3, 15, 17
<i>Ophiostoma minor</i> (Hedgc.) Syd. & P. Syd.	Romania	<i>P. nigra</i> , <i>P. sylvestris</i>	4
<i>Ophiostoma minus</i> (Hedgc.) Syd. & P. Syd.	France, Spain, Italy, Switzerland, Poland	<i>P. pinaster</i>	3, 7, 13, 14, 17
<i>Ophiostoma pallidobrunneum</i> (Olchow. & J. Reid) Georg Hausner & J. Reid	Spain	<i>P. pinaster</i>	3
<i>Ophiostoma pallidulum</i> Linnakoski, Z.W. de Beer & M.J. Wingf.	Poland, Ukraine	<i>P. sylvestris</i>	8, 12
<i>Ophiostoma piceae</i> (Münch) Syd. & P. Syd.	Poland, Ukraine, Russia	<i>P. sylvestris</i> , <i>Pinus</i> spp.	6, 7, 18
<i>Ophiostoma piliferum</i> (Fr.) Syd. & P. Syd.	Spain	<i>P. pinaster</i>	3, 17
<i>Ophiostoma ranaculosum</i> (J.R. Bridges & T.J. Perry) Georg Hausner, J. Reid & Klassen	Spain	<i>P. pinaster</i>	3

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<i>Pesotum piceae</i> J.L. Crane & Schokn.	Romania	<i>P. nigra, P. sylvestris</i>	4
<i>Stereum hirsutum</i> (Willd.) Pers.	Slovakia	<i>P. balsamea</i>	19

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