IDENTIFYING HOTSPOTS FOR EHDV INTRODUCTION IN EUROPE BY TRADE AND WIND DISPERSAL PATHWAYS

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• Epizootic Hemorrhagic Disease Virus (EHDV), transmitted by Culicoides biting midges, is a growing threat for the livestock sector in Europe.

• Objective: Assessing the risk of further extension of EHDV-8, by two different pathways of introduction: the long-distance wind dispersal of Culicoides and the trade movements of live animals.

Our Dual-Pathway Risk Model to Quantify the Risk of EHDV Introduction by Two Pathways



Spatial Distribution of Wind and Trade Risks at Destination





- Higher risk level by wind dispersal of infected midges than by the trade
- High-risk destinations by the wind = France, Spain & neighbouring countries

• Low or very low risk level by the trade but extended risk zone • High-risk destinations by the trade = Spain, Italy

HeatMap of Risk between Source & Destination countries





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• France is the most contributing country to risk, irrespective of the pathway

• Portugal contributes to risk outside EU (Israel/Palestine) by trade pathway









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