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Quarantine Rusts of the world on 2021: Taxonomy, referenced hosts and Quarantine zones

*Royas de cuarentena en el mundo en 2021: taxonomía,
hospedadores referenciados y zonas de cuarentena*

J. L. Andrés Ares &
International Plant Quarantine Workgroup

Technical & Regulatory Review– *Revisión técnica y
normativa*

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Cuarentena Vegetal Internacional



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Summary

On the present paper the author carries out an actualized checklist of the rust species that are considered formal quarantine pathogens –according to the FAO concept– in any country of the world.

Key words: *Chaconiaceae*, *Coliosporiaceae*, *Cronartiaceae*, *Gymnosporangiaceae*, *Melampsoraceae*, *Phakopsoraceae*, *Phragmidiaceae*, *Pileolariaceae*, *Pucciniaceae*, *Pucciniastraceae*, *Reveneliaceae*, *Sphaerophagmiaceae*.

Resumen

En el presente trabajo el autor realiza una lista actualizada de las especies de royas consideradas de cuarentena en cualquier país del mundo según el concepto formal de plaga de cuarentena definido por la FAO.

Palabras clave: *Chaconiaceae*, *Coliosporiaceae*, *Cronartiaceae*, *Gymnosporangiaceae*, *Melampsoraceae*, *Phakopsoraceae*, *Phragmidiaceae*, *Pileolariaceae*, *Pucciniaceae*, *Pucciniastraceae*, *Reveneliaceae*, *Sphaerophagmiaceae*.

1. Terminological and conceptual precisions

According to FAO a quarantine agent is “an agent of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled”. This concept is different to the concept of regulated agent which is defined by the same organization as “a quarantine agent or a regulated non-quarantine agent” and also different from the concept of regulated non-quarantine pest defined by FAO as “a non-quarantine agent whose presence in plants for planting, affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party”. Not all of the countries have formal quarantine agent lists, some have either quarantine and regulated agent lists and others have only regulated agent lists. We have only considered on this paper formal quarantine agents, included on laws published by the governments of the countries, not of regions of such countries. Regulated non-quarantine rusts will be matter of a different paper. The objective of the present paper is to present the most important quarantine hemiptera of the world in 2021, the countries where they are considered quarantine pests and their most important referenced hosts. They are classified following conventional taxonomical criteria.

Rusts are one of the most important quarantine agents group due to their biological characters, they have complex cycles with more than one single host on them, they are easily dispersed large distances, are difficult to manage with conventional chemical methods and are easily resistant to conventional fungicides. These are the main reasons of the importance of their quick detection before they establish on new countries.

The objective of the present paper is to present the most important quarantine rusts of the world in 2021, the countries where they are considered quarantine agents and their most important referenced Hosts: They are classified following conventional taxonomical criteria as specified on Index Fungorum. We have only included host genera that have species with agricultural or ornamental interest.

2. List of quarantine rusts worldwide

ORDER Pucciniales

2.1. FAMILY CHACONIACEAE

1. Scientific name: *Olivea tectonae*

Quarantine countries: Guatemala.

Hosts: *Tectona grandis*.