



Technical Working Party for Ornamental Plants and Forest Trees**TWO/54/4****Fifty-Fourth Session****Hanover, Germany, June 13 to 17, 2022****Original:** English**Date:** May 25, 2022

DISEASE RESISTANCE IN ORNAMENTAL CROPS*Document prepared by an expert from the Netherlands**Disclaimer: this document does not represent UPOV policies or guidance*

The annex to this document contains a copy of a presentation “Resistance to *Puccinia horiana* in *Chrysanthemum* - Progress report concerning a potential new DUS characteristic”, to be made by an expert from the Netherlands, at the fifty-fourth session of the TWO.

[Annex follows]

	
	<p style="text-align: center;">Resistance to <i>Puccinia horiana</i> in <i>Chrysanthemum</i></p> <p style="text-align: center;">Progress report concerning a potential new DUS characteristic</p>
	<p style="text-align: center;">Diederik Smilde Amanda van Dijk</p>

	<p style="text-align: center;">Ringtest in 2021</p>
	<p>Aims:</p> <ul style="list-style-type: none">• to launch a differential set• to validate two isolates on the set<ul style="list-style-type: none">• NL1• LK1• to agree on a protocol with sufficient reproducibility

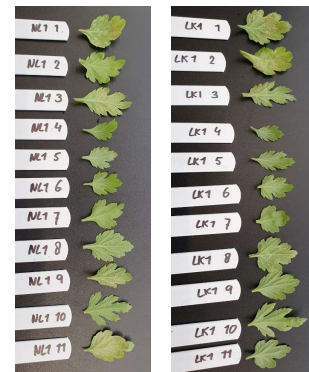
Observation scale, 21 days after inoculation

Observation	Interpretation	Code
No pustules	Resistant	0
1-10 pustules per leaf	Resistant	1
>10 pustules per leaf	Susceptible	2


- This scale was published by De Backer (ILVO, Belgium) in 2011


Ringtest in five labs

Cultivar	Isolate	
	NL1	LK1
1	S	S
2	R	S
3	S	S
4	R	R
5	R	R
6	R	R
7	S	R
8	R	S
9	S	R
10	R	R
11	S	R



All five labs had the same results, including one lab with no previous experience with this test

	<h2 data-bbox="565 296 1179 344">Present topics under study</h2>
	<ul data-bbox="321 384 1073 758" style="list-style-type: none"><li data-bbox="321 384 976 415">• to consider the protocol robust and validated<li data-bbox="321 459 727 527">• to denominate two isolates - <i>NL1 and LK1</i><li data-bbox="321 571 889 638">• to reveal the names of the differentials - <i>subject to company approval</i><li data-bbox="321 682 1073 758">• to reduce the number of differentials - <i>for example, one differential per pattern: 1, 2, 7, 11</i>

	<h2 data-bbox="716 1205 1024 1253">What is next?</h2>
	<p data-bbox="313 1346 1308 1455">Naktuinbouw will continue to work together with companies to fulfill the UPOV criteria for adding a new characteristic to describe resistance to <i>Puccinia horiana</i> in <i>Chrysanthemum</i></p>



[End of Annex and of document]