

Rosa* sp: a new host for *Ralstonia solanacearum



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information submitted by a grower of cut flowers on August 2015

identity confirmed on September 2015

wilting symptoms on young shoots of *Rosa* plants in the affected greenhouse, leaves chlorotic and wilting





Armando



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black discoloration and necrosis on stems





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First record *R. solanacearum* on *Rosa sp.*

- symptoms observed at a cut flower production company
- variety 'Armando'
- propagation company of *Rosa* plants
- variety 'Armando' and 'Red Naomi'
- Tracing revealed more cases with (possible) contaminations
- Race 1

	Positive	Pending plus	Pending	Negative	Under investigation	Total
<i>Rosa</i> spp.	6	31	5	360	147	549
Water	1	5	2	59	25	92
	7	36	7	419	172	641

EU (1998) Council Directive 98/57/EC, *Official Journal of the European Communities*, no. L235, 8–39.

Pest report to EU

- Information on the infested area, severity and source of the outbreak

One greenhouse cut flower production variety **Armando** of 1.57 ha, whereby **0.3 ha** is affected with **22,000** cut plants for cut flower production.

One greenhouse cut flower production variety **Red Naomi** of 20 ha, whereby **5 ha** is affected.

Propagation company: several batches of propagation material on Rockwool blocks.

- Three other varieties of Rosa at the same location did not show any symptoms.
- Many plants all over the greenhouse exhibited symptoms. The pathogen may have been spread by the irrigation system of the greenhouse.

Phytosanitary measures

- all affected plants were destroyed immediately.
- propagation material of the affected lot were destroyed.
- affected plants for cut flower production were destroyed including all plants in the two neighbouring rows.
- specific hygiene measures were imposed on infected companies for staff, equipment and storage containers.
- measures have been taken aimed at eradication and for preventing spread. The source of the outbreak is unknown and under investigation.

Previous infections

- *R. sol* (race 1) on *Anthurium* (NL pest report August 2015)
- *R. sol* (race 1) on *Curcuma* (NL pest report August 2014)

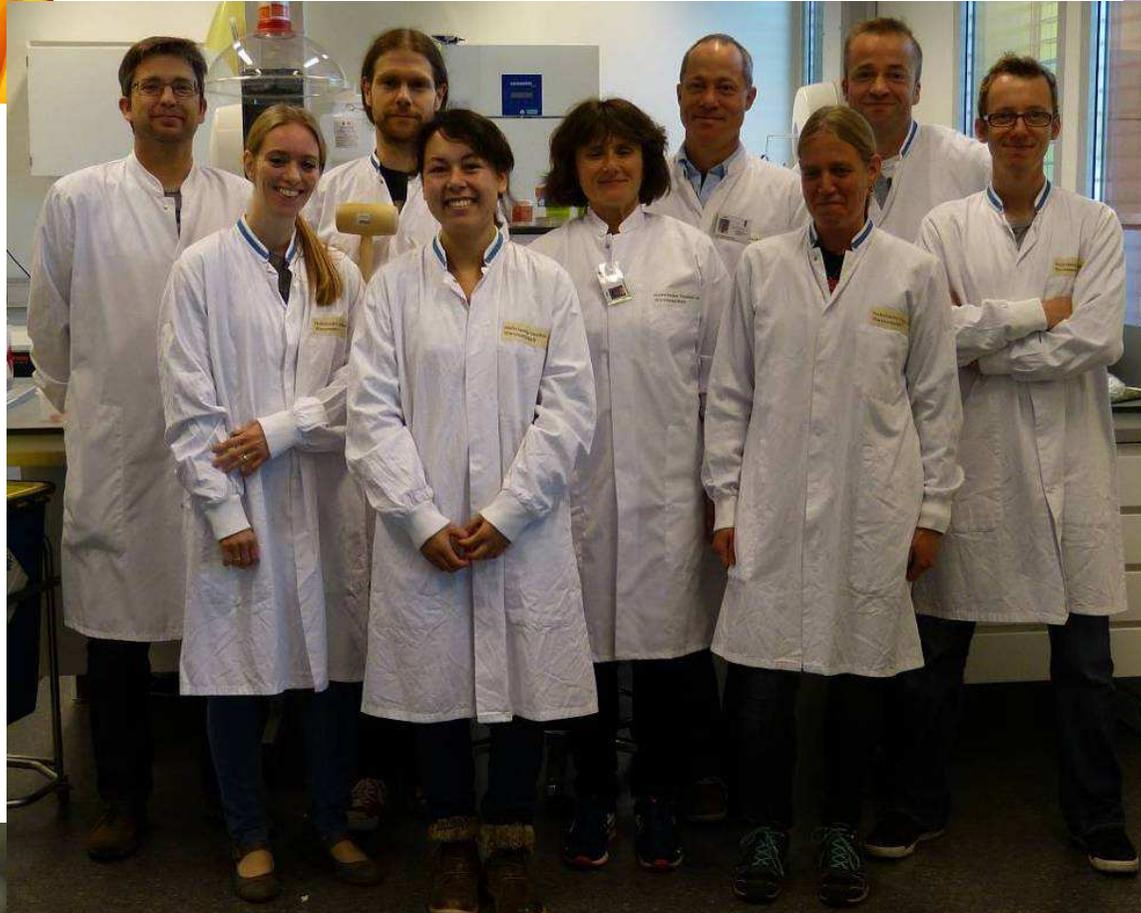


Is there a link with *R. sol* (race 1) on *Rosa* sp.?

- AFLP analysis (database > 300 *R.sol* isolates), collaboration with Naktuinbouw
- Set isolates from recent cases on *Anthurium* sp. and *Curcuma* sp., incl water sources compared with isolates from *Rosa* sp.

Working plan

- Further characterization of the *R.sol* race 1 isolates
- Assessment of the survival potential of *R.sol* race 1 isolates in water under different conditions
- Assessment of the virulence of *R.sol* race 1 isolates on multiple host plants



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