

- 471-1 **Characterization and extended host range of *Phytophthora nicotianae* isolates on vegetable and ornamental crops in Brazil**
(Caracterização e gama de hospedeiros extendida de isolados de *Phytophthora nicotianae* em hortaliças e plantas ornamentais no Brasil)

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Resumo

We have characterized *Phytophthora nicotianae* isolates found on various vegetable crops and on an ornamental plant in Brazil. The 34 isolates studied were cultured from parsley (12), periwinkle (12), onion (3), okra (2), lettuce (2) and one each from squash, zucchini, and cucumber. All isolates were identified at species level by their morphological features. DNA was extracted from a subset of 14 representative isolates and the internal transcribed spacer (ITS) loci was sequenced. BLAST searches resulted with all isolates sharing 100 to 98.6% identities with known sequences of *P. nicotianae*, confirming the morphological characterization. When isolates were characterized for their mating type, using tester strains, the A1 and A2 isolates accounted for 32% and 68%, respectively. Inoculation experiments were performed with all isolates infecting their respective hosts and tissue type such as fruits (fruit rot isolates) or plantlets (root and stem rot isolates). All isolates were pathogenic to its original host, causing symptoms similar to the field findings. The same species used during inoculation experiments was recovered from all infected fruit or root and stem rots, thus fulfilling Koch's postulates. The new updated host list for *P. nicotianae* includes new reports for Brazil such as parsley, periwinkle, onion, okra and lettuce plants as well as squash, zucchini and cucumber fruits.

Apoio: Fap-DF, CNPq