

# A new host and distribution record of *Pythium irregulare* Buisman, in Canada

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*Pythium irregulare* Buisman was identified as the causal agent of basal stem rot of greenhouse geraniums at Lacombe, Alberta. This note is the first report of this fungus causing a disease on *Pelargonium* in Canada.

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*Pythium irregulare* Buisman a été identifié comme la cause de la pourriture du collet des geraniums de serre à Lacombe, en Alberta. Cet article est le premier à faire mention de ce champignon comme cause d'une maladie chez *Pelargonium* au Canada.

In the spring of 1986, two month old greenhouse geranium seedlings (*Pelargonium zonale* cv Sprinter grown at Agriculture Canada, Lacombe, Alberta) exhibited signs of basal stem rot. The rot appeared as black lesions on the stems at the soil surface. The lesions expanded rapidly until the stem was girdled to a height of 2.5 cm above the soil surface. By the time the lesion had progressed to this point, which was only a matter of 2-3 days, the plant was dead.

The plants exhibiting symptoms were found to be infected with *Pythium irregulare* Buisman (confirmed by Biosystematic Research Institute, Ottawa), an organism mainly associated with damping-off of vegetables (1,2,3) and root rot of vegetables and ornamentals (2,4,5). This is the first report of *P. irregulare* causing basal stem rot on geraniums in Canada (2).

The geraniums were raised from seed in a steam pasturized soil mixture (sand, peat moss, vermiculite and soil). They were maintained at 18-21°C day and 13-18°C night temperatures and were watered with deionized water when soil moisture

was low. Four different colours of the "Sprinter" geranium were sown, each exhibiting a different disease reaction to *P. irregulare*. From most to least resistant, they were "Show Girl Sprinter", "White Sprinter", "Scarlet Sprinter" and "Salmon Sprinter". These disease reactions remained through the growing season and surfaced again in autumn 1986 when cuttings of the original survivors were accidentally over watered in the greenhouse.

## Acknowledgement

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## Literature cited

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