

Research findings . . .

Under this column appear short notes on important breakthroughs/significant achievements in original research of high calibre in the field of mycorrhizas, which have not yet been published.

Occurrence of vesicular arbuscular mycorrhizal fungi in the Tubers of *Pueraria tuberosa* (Willd.) DC.

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Introduction

It is well known that vesicular-arbuscular mycorrhizal (VAM) fungi occur in most of the angiospermic taxa as root symbionts. However, VAM infections have been reported earlier in root-like leaves of *Salvinia* (Bagyaraj, Manjunath, Patil 1979); senescent leaves of *Fumaria hygrometrica* Sibth. (Park, Linderman 1980); pegs (Graw, Rehm 1977) and decaying leaves (Taber, Trappe 1982) of *Arachis hypogaea* L.; in scale leaves of *Zingiber officinale* Rosc. (Taber, Trappe 1982) and *Curcuma longa* L. (Sampath, Sullia 1992); in corms of *Amorphophallus commutatus* Engler (Rodrigues 1995). The present study was conducted to find out whether there is VAM infection in the tubers of *Pueraria tuberosa* (Willd.) DC. (Fabaceae).

Materials and methods

Freshly collected tubers of *Pueraria tuberosa* (Willd.) DC. were washed in distilled water. They were then treated in 10% KOH for one hour at 80 °C, washed in distilled water, stained in 0.05% trypan blue, and later cut vertically into fine slices using a razor blade and observed for VAM infection.

Results

It was observed that the tubers showed VAM infection, which was confined around the root base, only in the outermost parenchymatous layers of the tubers. Well developed hyphae and vesicles were observed.

The term *mycorrhiza* was regarded inappropriate by Taber, Trappe (1982) who coined the term *mycophyllon* for leaf association. Similarly the term *mycorrhizome* was designated for rhizomatous association (Iqbal, Nasim 1986) and *mycocorm* for VAM association in corms (Rodrigues 1995). In the present type of association, the term *mycotuber* may be used.

The present findings suggest that VAM fungi—besides colonizing plant roots, scale leaves, and corms—may also colonize tubers which is considered to facilitate the uptake of nutrients to the plant.

References

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Certain peculiar features of mycorrhizal association in the ground orchid *Spathoglottis plicata* Blume

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Introduction

The mycorrhizal association is a very well-known phenomenon of mutualistic relationship that exists