

Research findings . . .

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

The occurrence of VAM fungi in the corms of *Amorphophallus commutatus* Engler

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Introduction

Vesicular-arbuscular mycorrhizae (VAM) are the most common type of all mycorrhizae occurring in the majority of angiospermic taxa as root symbionts. However, there are reports on the occurrence of VAM in portions other than roots, namely, 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.; and scale leaves of *Zingiber officinale* Rosc. (Taber, Trappe 1982) and *Curcuma longa* L. (Prabha, Sullia 1992). The present study was conducted to find out whether there is VAM infection in the corms of *Amorphophallus commutatus* Engler (Araceae).

Materials and methods

Freshly collected corms of *Amorphophallus commutatus* Engler were washed in distilled water after staining in 0.05% trypan blue, cut vertically into fine slices using a sharp razor blade, and observed for VAM infection. The method of Phillips, Hayman (1970) was employed.

Results and conclusions

It was observed that the corm showed VAM infection, which was confined only around the root base, in the outermost parenchymatous layers of the corm. Although no arbuscles were found, well developed hyphae and vesicles were observed.

The term 'mycorrhiza' was regarded inappropriate by Taber, Trappe (1982) for such type of associations. Unlike the term 'mycophyllon' for leaf association (Taber, Trappe 1982) and 'mycorrhizome' for rhizomatal association (Iqbal, Nasim 1986), the term 'mycocorm' seems to be suitable for this type of association.

The present findings suggest that VAM fungi, besides colonizing plant roots, leaves, scale leaves,

and rhizomes, may also colonize corms. This is thought to facilitate the uptake of nutrients by the plant.

References

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The occurrence of vesicular-arbuscular mycorrhizal fungi in arable soils of Konkan and Solapur region of Maharashtra

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Introduction

The survey of two regions of Maharashtra, namely Konkan region and Solapur region, was carried out to obtain qualitative and quantitative data on the