

## QUALITY CONTROL OF COMMERCIAL ARBUSCULAR MYCORRHIZAL INOCULUM

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In Germany there are only a few companies which try to produce and sell arbuscular mycorrhizal (AM) fungi. Initiated by the Technical University Braunschweig, most of them met in December 1997 and founded the "Interessenvertretung Mykorrhiza-Anwendung im Gartenbau" (Committee for the Application of Mycorrhiza in Horticulture). This group identified the lack of a quality control of AM inoculum as one of the main reasons for the low acceptance of mycorrhizal technology in horticultural practice.

Different aspects must be considered when setting the standards for quality control of arbuscular mycorrhizal inoculum. A customer must be exactly informed a) what he is going to buy, i.e. which arbuscular mycorrhizal fungi, as well as eventual contaminations the inoculum contains, b) what results he can expect the inoculum to achieve and c) that the inoculum poses no potential risks to plant health.

The group agreed to describe their products with the following recommendations:

- Purpose of the product and how to use it
- Content with species names, strain numbers and production control number of the company
- Guarantee of pathogen free content
- Mycorrhizal effectiveness in a standard test
- Maximum dilution of the content
- How to store the inoculum and recommended dates of usage

In current research projects, scientists of biotechnical companies and the Technical University Braunschweig supervise the establishment of a standardized system for quality control commencing with the inoculum production process and ending with the description of the product on a documentation sheet for customers.