

**EXPERIENCES MADE WITH THE DETECTION OF *AGROBACTERIUM VITIS*  
IN GRAPE PROPAGATING MATERIAL IN GERMANY**

Jens P. JÄGER

Staatliche Lehr- und Forschungsanstalt für Landwirtschaft, Weinbau und Gartenbau,  
Fachbereich Phytomedizin, Germany

**ABSTRACT**

After the severe frosts occurring during the winters of 1984 – 1986 and a subsequent outbreak of the crown gall disease that affected numerous vineyards, an indexing of grapevine propagating material was carried out to separate latently infested grapevine plants from healthy ones.

Because reliable detection methods basing on molecularbiological techniques were not available at that time a three step procedure was conducted:

1. in case of scions a visual selection of plants without crown gall symptoms within diseased vineyards or within diseased grapevine-clones respectively,
2. a processing of basal parts of one year old canes in case of rootstocks and two year old canes in case of scions for to isolate *A. vitis* (canes were shaped by the use of a high speed milling cutter, grounded with sterile water and sand; the supernatant was plated on Brisbane and Kerr 3DG semiselective medium; the *Agrobacterium* sp. Colonies were purified on TSBA medium, 50-80mg of the pure culture were prepared according to the method of Miller and Berger, 1985),
3. an identification of isolated microorganisms by a gas chromatography of their whole cell fatty acid patterns.

Several thousands of grapevine plants were tested in that way and plants found to be free of *A. vitis* served as motherplants for healthy grape propagating material. The tested material has been counter-tested, but none reinfested plant has been found up to now showing that the selection of grapevine free from *A. vitis* has the potential to improve the sanitary state of propagating material.