



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## Detection of Crown Gal Agent ( *Agrobacterium tumefaciens*) in Grapevine Propagating Material

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**Abstract:** Polyclonal antiserum produced against *Agrobacterium tumefaciens* (biovar 3) reacted in immunofluorescent test with biovar 3 strains of *A.tumefaciens*, causal agent of crown gal, from Central Anatolia. The antiserum did not react with *A.tumefaciens* biovar 1 (except for 1/200 dilution), biovar 2, other plant pathogens and symbionts. Vacuum extraction procedure were applied to recover *A.tumefaciens* from xylem vessels of one year old dormant grape cuttings. IFAS and selective media were used to detect bacteria. *A.tumefaciens* (biovar 3) was recovered from six cuttings of 8 infected vines and seven of 150 apparently healthy vines in Central Anatolia. The sensitivity threshold of the vacuum extraction method and the effectiveness of the IFAS and selective media were experimentally evaluated. Roots of 1 year old grafted vines of 27 cultivars were also examined for the presence of *A.tumefaciens*. Six of these cultivars were contaminated with tumorigenic biovar 3 and seven of these with nontumorigenic biovar 3 or 1. Of 28 strains of *A.tumefaciens* isolated, 25 were identified as biovar 3, and 3 as biovar 1 according to their physiological characteristics.

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