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Antibiotics for *Agrobacterium* Elimination in Appl

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We investigated several antibiotics including carbenicillin (CBPC), cl (CVA/AMPC), cefotaxime (CTX), meropenem (MEPM), vancom doxycycline (DOXY) for *Agrobacterium* elimination during apple

growth of *Agrobacterium tumefaciens* EHA101 was suppressed : CBPC, 750 mg·L⁻¹ of CVA/AMPC, less than 500 mg·L⁻¹ of CTX and 200 mg·L⁻¹ of DOXY, but growth was not suppressed at 1,50 the shoot length, there was no difference among antibiotic-free, CB treatments. However, the shoot length in the high-concentration treatment and DOXY was significantly shortened. However, the number of shoot segments at the concentration of MEPM rose. In CTX treatment, the shoot regeneration rate was lowered in comparison with antibiotic-free treatment; regeneration rate was maintained to some degree even after high-concentration treatment. The regeneration rate from leaf segments after MEPM treatment was lower than the antibiotic-free treatment. After DOXY treatment, leaf segments finally died. These findings indicated that bacterial cell wall synthesis inhibitors and MEPM were effective in eliminating *Agrobacterium*.

Key Words: [cefotaxime](#), [Malus × domestica Borkh.](#), [meropenem](#)

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