

04-2-27

Shoot Induction of Three Grape Cultivars

Hye-Jeong Park* and Hyeon-Cheol Cha

Department of Biology, Dankook University, Cheon-an, Chungnam 330-714, South Korea

Objectives

We examined the effects of BA and kinds of media to induce multiple-shoots for the propagation of grapevines.

Materials and Methods

1. Materials: Three grape cultivars('3306', '3309' and 'Buffalo')
2. Methods: Culture of shoot-tip in MS or Nitsch medium with BA(0.01, 0.1, 1 and 5 mg/L) and media(MS, or Nitsch).

Results and Discussion

We supposed that cytokinins would be active on shoot formation from the explant of shoot-tip. So, explants were cultured on MS or Nitsch medium supplemented with various BA concentrations. Among them, high concentrations of BA such as 1 or 5 mg/L(N4, N5) showed the highest frequency on multiple-shoot induction in both media. Also, the frequency of multiple-shoot induction was different among 3 cultivars. In '3306' and '3309', multiple-shoots induction ratio was higher on MS than Nitsch medium. But, in 'Buffalo', Nitsch medium was more effective than MS medium for multiple-shoots induction.

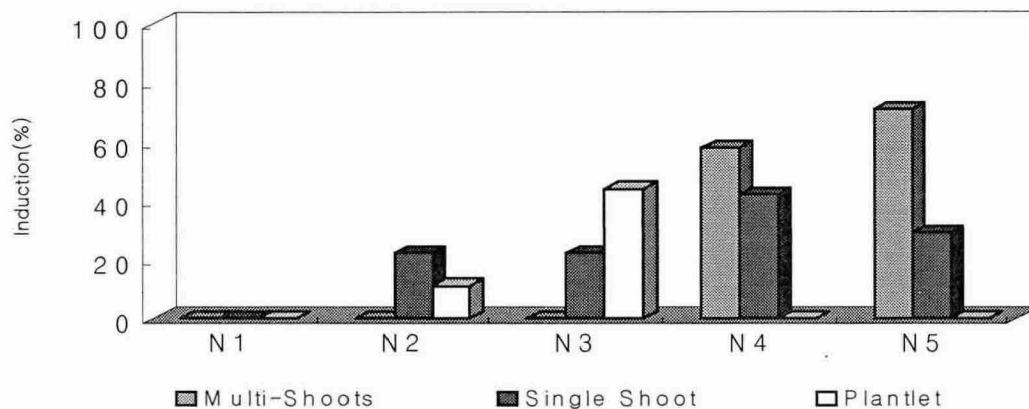


Figure. Effect of BA concentrations on shoot induction from shoot tips after 30d of culture on Nitsch medium in 'Bufflo'. (1:0, 2: 0.01, 3:0.1, 4: 1, 5: 5mg/L BA)