

Role of the Hydroxymethyl Group for the Inhibitory Activity of Penienone

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Penienone was isolated from the culture filtrate of *Penicillium* sp. No.13 and completely inhibited hypocotyl elongation and root growth of lettuce seedlings at a concentration of 300 mg/l. In order to elucidate the active site of penienone, three derivatives were prepared and tested for their inhibitory activity against the growth of lettuce seedlings. The results indicated that hydroxymethyl group in the molecule of penienone was essential to exhibit the remarkable inhibitory activity against the growth of lettuce seedlings.