

## Dissipation Patterns of Fungicide Hexaconazole and Pyridaben in Korean Melon under Greenhouse Condition

(시설재배 참외 중 살균제 Hexaconazole와 Pyridaben의 잔류 양상)

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The residue pattern and biological half-lives of fungicide hexaconazole and insecticide pyridaben in melon under greenhouse condition. Used pesticides for field applications were hexaconazole 2.0% SC and pyridaben 20.0% WP. Pesticide residues in Korean melon were analyzed until 14 days after application at recommended and double dose rate. Hexaconazole was analyzed by GLC equipped with NPD and florasil glass column was used for cleanup. In case of pyridaben, analytical instrument was HPLC equipped with UVD and florsil glass coulumn was used for cleanup. Initial concentration of hexaconazole in Korean melon at recommended and double dose rate were  $0.03 \pm 0.00$  mg/kg and  $0.04 \pm 0.01$  mg/kg those below than MRL(0.1 mg/kg, established by KFDA in Korean melon). The biological half-life equations were  $C_t = 0.0194e^{-0.091x}$  (half life : 4.7 days) and  $C_t = 0.0268e^{-0.095x}$  (half life : 7.3 days) at recommended and double dose rate, respectively. Pyridaben concentrations in Korean melon were  $0.40 \pm 0.01$  mg/kg and  $0.73 \pm 0.08$  mg/kg those below than MRL 1.0 mg/kg. The biological half-life equations were  $C_t = 0.3457e^{-0.111x}$  (half life : 6.2 days) and  $C_t = 0.7021e^{-0.093x}$  (half life : 7.5 days) at recommended and double dose rate, respectively.

**Key words :** Biological half-life, Fungicide, Hexaconazole, Pyridaben, Korean melon

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