

**Effect of GA4+7 treatment on the capsaicinoid content of chilli (*Capsicum annuum* L. var. Kulai)**

**ABSTRACT**

The effect of GA4+7 treatment on the capsaicinoid content of chilli was studied in chilli fruit grown under glasshouse and field conditions. The major capsaicinoids  $\delta$  capsaicin (CAP), nordihydrocapsaicin (NDHC) and dihydrocapsaicin (DHC) were separated and quantified by HPLC and their identity further confirmed by GCMS. Higher total capsaicinoid content was obtained with GA4+7 treatment compared with the untreated control. More pronounced effect of GA4+7 was observed on NDHC and DHC. The capsaicin content was significantly increased by GA4+7 treatment at peak flowering (PF) and with double application at early flowering and peak flowering (EF + PF) only. The difference between glasshouse and field treated fruit was not significant.

**Keyword:** Capsaicinoids; Pungency; Plant growth regulator (PGR); GA4+7; Flowering; Chilli