

Title Comparative study of catechin compositions in five Japanese persimmons (*Diospyros kaki*)
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Abstract

In order to study catechin compositions in five Japanese persimmons: Hiratanenashi (HN), Tone-wase (TW), Ishibashi-wase (IW), Maekawa-jiro (MJ) and Matsumoto-wase-fuyu (MF), the contents of epigallocatechin (EGC), catechin (C), and epicatechin (EC) were determined. Total phenolic contents were also determined for the studies of the catechin composition. Identification and quantification of the catechins were performed by HPLC. The EGC contents in three astringent persimmons (HN, TW and IW) were higher than those of two non-astringent persimmons (MJ and MF). The EGC content in HN (astringent) was the highest among the five Japanese persimmons. The EGC content in MF (non-astringent) was the lowest among the five Japanese persimmons. Therefore, astringent persimmons may be better sources of the natural antioxidant, EGC, than non-astringent persimmons, and HN (astringent) may be the best source of EGC among the five Japanese persimmons. This is the first comparative study of catechin compositions in five Japanese persimmons.