Glucosyl terpenates from the dried fruits of *Prunus domestica* L.

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The chemical structures of 9 compounds isolated from the dried fruits of *Prunus domestica* L., were elucidated on the basis of NMR and MS analyses. Each isolated compound was determined to be scopolin (1), (3-O-cis-p-coumaroyl-β-D-fructofuranosyl)-(2→1)-α-D-glucopyranoside (2), 1S-(4-β-D-glucopyranosyl-3-methoxyphenyl)-2R-[4-(3-hydroxypropyl)-2-methoxyphenoxy]-1,3-propanediol (3), β-D-glucopyranosyl 9-carboxy-8-hydroxy-2,7-dimethyl-2E,4E-nonadienate (4), β-D-glucopyranosyl 7-carboxy-2-methyl-2E,4E-octadienate (5), 8-hydroxy-2,7-dimethyl-2E,4E-decadienedioic acid 1-β-D-glucopyranaryl ester 10-methyl ester (6), (3-O-trans-p-coumaroyl-β-D-fructofuranosyl)-(2→1)-α-D-glucopyranoside (7), β-D-glucopyranosyl cinnamate (8), and 2,7-dimethyl-2E, 4E-octadienedioic acid (9), respectively. Compounds 2, 3, 7, 8, and 9 were isolated from *Prunus domestica* L., for the first time and compounds 4, 5 and 6 were novel glucosyl terpenates. On the basis of the chemical structures of some isolated compounds from *Prunus domestica* L., a possible biosynthesis pathway of them was also proposed.

Biography

Shin-ichi Kayano has graduated from Department of Food Science and Nutrition, Osaka City University, Japan, in 1985 and he has worked as a Senior Researcher at Research Institute, Miki Corporation, Japan, until 2004. He was awarded a PhD in Science in 2004 from Osaka City University, Japan, under the supervision of Professor Nobuji Nakatani. The same year, he has changed his job in Kio University and currently working as a Professor since 2009.

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