Isolation of N-acetyldopamine Dimer as LDL-antioxidant from Perostracum Cicadea

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N-acetyldopamine dimer, (2R, 3R)-2-(3',4'-Dihydroxyphenyl)-3-acetylamino-6-(N-acetyl-2"-aminoethyl)-1,4-benzodioxane (1), and 3,4 -dihydroxybenzaldehyde (2), were isolated from the ethyl acetate extracts of *Peroastraum Cicadea* using silica-gel column chromatography, preparative TLC, and HPLC. The NMR spectroscopic analyses showed the molecular formula of compounds were $C_{20}H_{22}N_2O_6$ for 1 and $C_7H_6O_3$ for 2. EI-mass spectrometry gave molecular mass of 386 for 1 and 138 for 2. Compounds 1 and 2 exhibited low-density lipoprotein (LDL)— antioxidant activity in the thiobarbituric acid-reactive substances (TBARS) assay (1: $IC_{50} = 2.1 \mu M$ and 2: $IC_{50} = 4.1 \mu M$), the relative electrophoretic mobility (REM) of ox-LDL, the apoB-100 fragmentation on copper-mediated LDL oxidation, and radical DPPH scavenging activity.

Key words: Peroastraum Cicadea, LDL-oxidation Inhibitor