Senescence-Promoting Effect of Arabidopside A

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Arabidopside A isolated from *Arabidopsis thaliana* is a rare oxylipin, containing 12-oxophytodienoic acid (OPDA) and dinor-oxophytodienoic acid (dn-OPDA) which are known as precursors of jasmonic acid (JA) and methyl jasmonate (MeJA). The senescence-promoting effect of arabidopside A was examined by an oat (Avena sativa) leaf assay under dark or continuous light condition. Arabidopside A promoted senescence of oat leaves, and the promoting activity was more effective than for JA and OPDA, and as strong as for MeJA, which was well known to be a senescence promoter. These results suggest that arabidopside A plays important roles in leaf senescence.

Key words: Arabidopside A, Senescence, Chlorophyll Degradation