

## **Induction of biosynthetic activity of sesquiterpene compounds by artificial modification of signal-transduction processes of *Aquilaria* plant cells**

**Fumiya Kurosaki**

*Graduate School of Medicine and Pharmaceutical Sciences for Research University of Toyama*

Several lines of evidence suggested that Rac/Rop GTPases in *Aquilaria microcarpa* play roles in jasmonates-induced activation of sesquiterpene biosynthesis in the plant cells. The expression of farnesyl diphosphate synthase gene of *A. microcarpa* was markedly increased even in the absence of methyl jasmonate in the cells over-expressing a calmodulin gene and a Rac/Rop GTPase gene. These findings suggest that calmodulin and Rac/Rop GTPase proteins should function as a key mediator in jasmonate-signaling in higher plant cells.