

## Larvicidal agents derived from *Chamaecyparis obtusa* leaves against three mosquito larvae

Chi-Hoon Lee, Ju-Hyun Jeon, Hoi-Seon Lee

Faculty of Biotechnology and Research Center for Industrial Development of Biofood Materials,  
College of Agricultural and Life Science, Chonbuk National University, Chonju 561-756, Korea  
TEL: +82-63-270-2544, FAX: +82-63-270-2550

Mosquito larvicidal activity of *Chamaecyparis obtusa* leaf-derived materials against the 4th-instar larvae of *Aedes aegypti* (L.), *Aedes togoi* (Theobald), and *Culex pipiens pallens* (Coquillett) was examined.<sup>1-4)</sup> A crude methanol extract of *C. obtusa* leaves was found to be active against the 3 species larvae, and the hexane fraction obtained from the methanol extract of *C. obtusa* leaves showed a strong larvicidal activity (100% mortality) at 100 ppm. The biologically active component of *C. obtusa* leaves was characterized as  $\beta$ -thujaplicin by spectroscopic analyses. The LC<sub>50</sub> value of  $\beta$ -thujaplicin was 2.91, 2.60, and 1.33 against *Ae. aegypti*, *Ae. togoi*, and *Cx. pipiens pallens* larvae. Naturally occurring *C. obtusa* leaf-derived compound merits further study as potential mosquito larval control agents or lead compound.<sup>5-7)</sup>

### References

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