

# **Biomimetic Conversion of (3*S*)-(–)-Neodictyoprolenol to Optically Pure (1*S*,2*R*)-(–)-Dictyopterene B, Marine Algal Sex Pheromone**

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Both enantiomers of (3*S*)-(–)- and (3*R*)-(+)-Neodictyoprolenol [(3*S*,5*Z*,8*Z*)-(–)-1,5,8-undecatrien-3-ol] were successfully converted to the algal sex pheromone, (1*S*,2*R*)-(–)-dictyopterene B and (1*R*,2*S*)-(+)-dictyopterene B in high enantiomeric purities (*e. e.* > 99%), respectively, by the biomimetic reaction involving phosphorylation and elimination under a mild condition.

*Key words:* Biomimetic Conversion, Pheromones, Marine Algae