

Metabolic Transformation of the Brassinosteroid 24-*Epi*-castasterone by the Cockroach *Periplaneta americana*

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After feeding of 24-*epi*-castasterone to the cockroach *Periplaneta americana* an organ-specific epimerization of the brassinosteroid to 2,24-*diepi*-castasterone could be detected in female insects. The metabolite being observed only in the ovaries and not in the testes of the insect was identified by GC/MS in comparison with a synthesized authentic sample. Contrary, 24-*epi*-brassinolide is not metabolized in the sexual organs of *Periplaneta americana*. This is the first evidence of a metabolic transformation of a brassinosteroid in insects.