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**C<sub>27</sub>-BRASSINOSTEROIDS BIOSYNTHESIS IN *ARABIDOPSIS THALIANA***

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Metabolic studies using a cell-free enzyme solution prepared from *Arabidopsis thaliana* demonstrated that two parallel biosynthetic pathways to generate 28-norcastasterone, namely the early and late C-6 oxidation for C<sub>27</sub>-brassinosteroids (BRs), are operative in the plants. In the presence of S-adenosylmethionine, the enzyme solution successfully mediated conversion of 28-norcastasterone to castasterone, indicating that the C<sub>27</sub>BRs biosynthesis is an alternative route to synthesize biologically active C<sub>28</sub>-BRs, castasterone and brassinolide, in the plant. In the presentation, biosynthetic connections between C<sub>28</sub>-BRs and C<sub>27</sub>-BRs biosynthesis as well as between the early and late C-6 oxidation pathway for C<sub>27</sub>-BRs will be explained. In addition, enzymes (genes) involved in the C<sub>27</sub>-BRs biosynthesis will be discussed.