Abstract UPSC Days 2011

**Transporters in Arabidopsis roots mediating uptake of amino acids at naturally-occurring concentrations**

Organic nitrogen is transported in the form of amino acids, that's why the amino acids are considered as the “currency of nitrogen exchange” in the plants. Recent studies of *Arabidopsis thaliana* (Arabidopsis) have identified three amino acid transporters involved in root amino acid uptake: Lysine Histidine Transporter 1 (LHT1), Amino Acid Permease 1 (AAP1) and Amino Acid Permease 5 (AAP5). In this study we used Arabidopsis plants with altered expression of LHT1, AAP1 and AAP5 with the aim to disentangle the role of each transporter for uptake of different amino acids at naturally-occurring (2-50 μM) concentrations.

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