

TRACE METALS MEMBRANE TRANSPORTERS IN PLANTS

Summary

Trace metals present in soil can be divided into two groups: essential metals indispensable for proper functioning of plant cells (e.g. Fe, Cu, Mn, Co, Zn, Ni), and non-essential metals (e.g. Cd, Hg, Pb, Cr). Transporters for essential trace metals in plants usually have a wide specificity and can equally transport non-essential metals. Maintaining homeostasis

by controlling the uptake, transport, removal and sequestration of metals is crucial for organisms. This work is dedicated to a short characterization of identified plant membrane transporters, belonging to several protein families: ZIP, YSL, NRAMP, P_{1B} -ATPases, ABC transporters, COPT, CAX, CDF and IREG.