

CORRECTION

Vol. 117: 311–319, 1998

Yan, F., Feurele, R., Schaffer, S., Fortmeier, H., and Schubert, S. Adaptation of Active Proton Pumping and Plasmalemma ATPase Activity of Corn Roots to Low Root Medium pH.

An error was introduced in the abstract during preparation for publication. The entire corrected abstract is reprinted below.

Corn (*Zea mays* L.) root adaptation to pH 3.5 in comparison with pH 6.0 (control) was investigated in long-term nutrient solution experiments. When pH was gradually reduced, comparable root growth was observed irrespective of whether the pH was 3.5 or 6.0. After low-pH adaptation, H⁺ release of corn roots in vivo at pH 5.6 was about 3 times higher than that of control. Plasmalemma of corn roots was isolated for investigation in vitro. At optimum assay pH, in comparison with control, the following increases of the various parameters were caused by low-pH treatment: (a) hydrolytic ATPase activity, (b) V_{max} and K_m , (c) activation energy of H⁺-ATPase, (d) H⁺-pumping activity, (e) H⁺ permeability of plasmalemma, and (f) pH gradient across the membranes of plasmalemma vesicles. In addition, vanadate sensitivity remained unchanged. It is concluded that plasmalemma H⁺-ATPase contributes significantly to the adaptation of corn roots to low pH. A restricted net H⁺ release at low pH in vivo may be attributed to the steeper pH gradient and enhanced H⁺ permeability of plasmalemma but not to deactivation of H⁺-ATPase. Possible mechanisms responsible for adaptation of plasmalemma H⁺-ATPase to low solution pH during plant cultivation are discussed.

Vol. 117: 667–678, 1998

Schuppler, U., He, P.-H., John, P.C.L., and Munns, R. Effect of Water Stress on Cell Division and Cell-Division-Cycle 2-Like Cell-Cycle Kinase Activity in Wheat Leaves.

The title of the paper was incorrectly altered in the editorial office prior to publication. The correct title of the paper should read:

Effect of Water Stress on Cell Division and Cdc2-Like Cell Cycle Kinase Activity in Wheat Leaves

The electronic version of the paper appears with the correct title.