

Abstract

Differentiation of apoplastic barriers in roots is affected by adverse environmental conditions (e.g. heavy metal toxicity, salinity or flooding). The apoplastic barriers, exodermis and endodermis, differ from each other in response to environmental conditions. The exodermis is more affected by these conditions and its occurrence is more variable. The presence of differentiated barriers affects root transport features like uptake, accumulation and entrance of pollutants or nutrients.

Key words: apoplastic barriers, heavy metals, differentiation, root, Casparian strips, suberin lamellae