Abstract

Intermediate filaments are one of the 4 categories of cytoskeletal proteins. They are restricted to Metazoa, though recently new homologues are found in SAR supergroup and Amoebozoa. In plants, intermediate filaments analogues exist, they are structural components of the plant lamina. These are nuclear matrix constituent proteins (NMCPs). However, other plant intermediate filaments have been recently annotated in literature. Aim of this thesis is to sort out these annotations and declare, whether the use of term "intermediate filament" is justified. The results suggest, that no true intermediate filament homologues occur in plants. To clarify these findings, further research is needed.