Terminal flower 1(TFL1) homolog genes in dicot plants

ABSTRACT

Terminal flowering1 (TFL1) is an important gene responsible for time of flowering in Arabidopsis thaliana. It belongs to phosphtidyl ethanolamine binding protein domain PEBP gene family. Throughout the past decade, genetic studies have found out several TFL1 like genes in dicots and monocots plants. In this paper, current advances in TFL1 homolog isolated from different dicot species, has been addressed. Arabidopsis thaliana, Antirrhinum majus, Brassica naapus, Citrus sinensis L, Pisum sativum, Vitis vinifera L, Beta palonga, Lotus japonicus, Lycopersicon esculentum, Impatiens balsamina, populus trichocarpa, Malus xdomestica, Pyrus pyrifolia, Pyrus communis, Cydonia oblonga, Chaenomeles sinensis, Cucumis sativus, Gossypium hirsutum,Capsicum annuum L.and Eriobotrya japonica are dicot plants which their TFL1 homologs will be discused here. Moreover, similarity and differences between them and other known genes, have been compared.

Keyword: Flowering; TFL1; Gene expression; Dicot; Arabidopsis