

Analysis of expression pattern of ricin and RCA genes during seed development of castor

The draft genome sequence of castor has revealed that there are 28 copies of ricin family genes and among them seven are full length genes containing both A and B chain sequences. To analyse the contribution of each of these seven sequences to the pool of ricin transcript in developing endosperm of castor, RT-PCR analysis was carried out with RNA isolated from the developing seeds of castor at different (19 -61) days after pollination using the specific primers designed for each of the seven genes. This analysis indicated that 3 genes of the family expressed at all the stages of seed development, the 4th gene didn't express at any stage and genes 5, 6 and 7 expressed only at some stages.