

Galactinol Synthase Gene Expression in *Coffea Arabica* L. under Water Stress

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SUMMARY

Galactinol synthase (GolS) catalyzes the formation of galactinol, which will produce raffinose oligosaccharides (RFOs). Expression of GolS during water deficit stress has been reported, probable due to the function of RFOs as osmoprotectant. Three galactinol synthase isoforms (*CaGolS1*, 2 and 3) were identified from the Coffee Genome Brazilian Project database (<http://www.lge.ibi.unicamp.br/cafe/>). The isoforms have similar length to others *GolS* genes. Northern blot analysis showed an increased in *CaGolS1* transcripts in coffee plants under water shortage when compared to plants in well-watered conditions. Transcripts of *CaGolS1* were specifically found on leaves and not in other tissues.