Abstract: 

Inroduction: Pulegone reductase (PR) is one of the genes in the biosynthesis pathway of monoterpenes in Mentha genus. The expression level of PR gene was studied under drought stress in Mentha pulegium. PR gene was studied under drought stress in Mentha pulegium. The expression level of PR gene increased under drought stress until 50% FC and then decreased at 25% FC. The highest gene expression of PR gene was observed at 50% FC. The highest gene expression of PR gene was observed at 50% FC. It seems that drought stress can induce the biosynthesis pathway of monoterpenes compounds in Mentha pulegium.

Method: Six weeks after sowing, seedlings were grown under soil moisture corresponding to 100, 75, 50 and 25% field capacity (FC) for the next four weeks. The expression level of PR gene was measured by semi quantitative RT-PCR.

Results: The expression level of PR gene increased under drought stress until 50% FC and then decreased at 25% FC. The highest gene expression of PR gene was observed at 50% FC.

Conclusion: It seems that drought stress can induce the biosynthesis pathway of monoterpenes compounds in Mentha pulegium.

Keywords: Gene expression, Drought stress, Pulegone reductase, Mentha pulegium

Presentation: Poster