

Title	The Development of Qualified F4 Inbred Lines for Tomato Breeding Programmes and Seed Technology Project
Number	TAGEM/BBAD/10/A01/P01/12
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Abstract:

Tomato (*Solanum lycopersicum* L.) is the most important vegetable in the world and Turkey. Especially, tomato is grown in more than 50% in greenhouse and all tomato varieties are hybrid. Due to intensive production, many diseases and pests (viral, fungal, bacterial, nematode) leads to significant economic losses in tomato production areas. The use of varieties resistant to many diseases and pests is the most effective and environmentally friendly method. The purpose of this project is to improve new tomato hybrid and lines suitable for greenhouse production, highly efficient, resistant to biotic and abiotic stress conditions. The most important pathogens which cause economic losses in our country Tomato Yellow Leaf Curl Virus (TYLCV), Tomato spotted wilt virus (TSWV), Crown and Root Rot (FORL) and nematode (*Meloidogyne incognita*) are serious problem. The use of molecular markers for resistance breeding program (Molecular Assisted Selection MAS) is a safe and effective method. In this project both classical and molecular tests are performed against these diseases and pests.