

***Determination of Effects of N and P fertilizers applied by Fertigation Method on the Yield and Some Quality Characteristics of pepper (The final report is not published)***

<b>Research Area</b>	Soil and Water Resources and Environment	
<b>Research Program</b>	Soil Fertility	
<b>Executive Institute</b>	International Agricultural Research and Training Center (IARTC)	
<b>Supporting Institute/s</b>	-	
<b>Project Leader</b>	Nuri CANDAN	Agricultural Engineer, M.Sc
<b>Other Researchers</b>	Kürşat ÜNER	Agricultural Engineer, M.Sc
	Mehmet GÜNDÜZ	Agricultural Engineer, M.Sc
	Vural KARAGÜL	Agricultural Engineer, M.Sc
	Oğuz Fehmi ŞEN	Agricultural Engineer,
	Prof. Dr. Dursun EŞİYOK	Agricultural Engineer, M.Sc
<b>Research Period</b>	2013 – 2015	
<p><b>Project Summary:</b> In Izmir, pepper cultivation is the third most extensively grown vegetable due to the fast population growth and consequently the growing food demand, food industry and trade. Along with breeding varieties for higher yield and quality, doing research on their nutrition requirements is also essential. As a result of climatic conditions and governmental subsidies, the expansion of drip irrigation systems has raised importance of fertigation.</p> <p>Meeting the nutritional requirements in precise concentrations and in time is the most advantageous aspect of the fertigation. Uniform distribution of the nutrition and irrigation water in the field reduces the losses through surface runoff and leaching and results in a cost effective plant production and clean environment.</p> <p>Yalova Yağlık 28 variety will be used in the experiment. The treatment levels of nitrogen will be N0= 0 kg N/da (0 ppm), N1 = 9 kg N/da (20 ppm), N2 = 18 kg N/da (40 ppm), N3= 27 kg N/da (60 ppm), N4= 36 kg N/da (80 ppm), and for the levels of phosphorus will be P0= 0 kg P2O5/da (0 ppm), P1= 5 kg P2O5/da (11 ppm), P2= 10 kg P2O5/da (22 ppm), P3= 15 kg P2O5/da (33 ppm), P4= 20 kg P2O5/da (44 ppm), respectively. The experiment will be carried out in 4 repetitions in complete randomized block design.</p> <p>The intervals of irrigation are 3 and 4 days and the fertilizers will be applied on each 4th day. In nitrogen treatments, Nitrogen will be given as ammonium nitrate (33%) and Phosphorus will be applied in the form of 85% phosphoric acid equally at the level of 15 kg P2O5/da for each plot. On the other hand, in Phosphorus treatment, phosphorus will be given as phosphoric acid (85%) and Nitrogen requirements will be applied in ammonium nitrate (33%) at the same level, 22 kg N/da, in each plot. The seedlings will be transplanted into the field in the second half of April. The harvests are planned to be at the end of July, August and September. Some yield and quality components will be examined by variance analysis every year and general conclusions will be reached by regression analysis.</p> <p><b>Key words:</b> Pepper, <i>Capsicum annum L.</i> , Fertigation, Nitrogen fertilizer, Phosphorus fertilizer, drip irrigation, Izmir</p>		