

O-14 (257)**EFFECTS OF DIFFERENT GROWING MEDIA ON ORGANIC PEPPER SEEDLING PRODUCTION**

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Seedlings are produced in specialized commercial nurseries during the last two decades. Peat is the most common growing medium in the conventional or organic seedling production. However, there is a need to develop alternative growing media due to the concerns about the peat in particularly in organic seedling production. The aim of this research was to develop growing medium using local resources as peat alternative in organic pepper seedlings production. Bell and sweet pepper cultivars cv. Ergenekon F₁ and cv. Sağnak F₁ respectively were sown into trays having 6 treatments composed of (1) local peat + clinoptilolite + composted farmyard manure (LP+CLI+CFM) (1:1:1; v:v), (2) local peat + vermicompost (60%LP+40%VC)(1.5:1, v:v), (3) local peat + clinoptilolite + vermicompost (LP+CLI+VC)(1:1:1; v:v), (4) local peat + perlite + composted farmyard manure (LP+PER+CFM)(1:1:1; v:v), (5) local peat + perlite + vermicompost (LP+PER+VC)(1:1:1; v:v) and (6) peat (P)(as control). After germination in a growth chamber for 3 days, seedlings were moved to a PE greenhouse which is specialized for seedling growing. Seedlings were fertilized by liquid composted farmyard manure (30 L ha⁻¹) once a day. Germination rate of seeds, stem and root length, fresh and dry weight of seedlings were determined when they were ready for planting in 38 days. The results showed that among the tested media for both pepper cultivars, LP+CLI+VC and 60%LP+40%VC were found as promising peat alternatives for commercial use considering their effects on seedling quality

Keywords: peat, perlite, clinoptilolite, vermicompost, composted farmyard manure