

Cultural practices

Almond trees resemble olives and grapes in being as versatile in their topographic and climatic requirements. In fact almonds are even less vulnerable to rockiness, steep slope, occasional droughts, and soil shallowness than olives and grapes, because they have the distinctive feature of a deeper root system. As such, almonds are particularly suitable in areas where land quality is poor, even for growing olives or grapes. This, however, comes at the cost of a much lower productivity in comparison with orchards grown on land with better quality or under irrigation.

West Bank farmers grow almonds by direct sowing of seeds from bitter or solid sweet varieties. Land reclamation prior to sowing is rarely practiced (a sharp contrast to Hebron vineyards). Emerging seedlings are either left to grow as they are, or grafted two years later with buds from the soft-shelled "Farek" variety. The new tree begins commercial production in about 2 - 3 years.

Mature orchards can thrive with minimal levels of husbandry, but again at the cost of lower productivity. It has been found that the vast majority of farmers do little other than ploughing of their orchards once or twice a year. Pruning is rare, as is pest control or fertilizer use.

An important feature of ^{the} almond tree, as mentioned earlier, is its brief productive life span, mostly in the range of 12 - 16 years. This is in sharp contrast to olives, but somewhat comparable to grapes. However, it is noticed that longevity of bitter and hard-shelled varieties is much longer than that of the soft-shelled farek. This, as we shall see later, is due mostly to the susceptibility of soft-shelled varieties to certain virulent insects common in the area.

Because of the relatively short life span of almonds they are commonly interplanted with olives for as long as they are too small to occupy their allotted land. Growers are encouraged to do so by the wide spacing of olive orchards (around 8 - 10 meters apart) and the farmers' drive to exploit their land more productively during the interim pre-maturity period. Almond trees will thus be uprooted in 7-8 years to give space to olives.

In principle, interplanting olives with almonds is certainly well justified on economic grounds, but in most areas this procedure has been practiced wrongly by leaving almonds too long in the orchard, hence causing severe damage to olives. With a deeper root system, almond trees compete more aggressively for scarce moisture and nutrients available in an already marginal soil. Consequently, olive trees remain stunted and fail to give a good crop, thus giving growers a further justification (though basically false) for maintaining almonds.

Profitability situation

As in the case of olives, profitability of almonds varies considerably as a result of pronounced fluctuations in output, which makes it very difficult to talk about an "average" yield. Ascertaining profitability is further compounded by the multiplicity of end products and non-systematic patterns of picking (green, half-solid, solid). The forthcoming analysis assumes that the entire crop is picked in the solid stage.

Table (VII-11) contains a summary of costs and returns per donum of productive almonds (10-12 years old). The figures cited below apply to the soft-shelled Farek variety. Comparison of net returns with bitter and hard-shelled almonds is summarized at the