

ALMINA

WALNUT

Evaluation Report of the Product Named Almina Established in Denizli by Minalitya Tarım in Walnut Plant

30 acres of Chandler variety was grown in a 12-year-old walnut garden. The effects and the differences created by the use of Almina were examined after 5 applications made on the leaves in 3-4 week periods in the experimental area.

In April 2021, the application and control plots were determined in accordance with the standard trial design, placed side by side in the garden. All maintenance and applications throughout the garden are the same, and the only difference between the control plot and the application plot is the Almina applications.

- In the garden, Almina applications were started at the beginning of April and applied from leaves at a dose of 1.5 kg / 100 lt during pre-flowering, fruit set, fruit growth and ripening stages.

When the air temperature rises above 36°C, the plant goes into heat stress and stops photosynthesis with the effect of direct sunlight. The temperature of the walnut fruit rises, first yellow and then dark brown/black spots may form, these burns cause shrinkage and darkening in the fruit, and the heat collected on the tree creates stress on the tree; While it causes yield loss up to 50%, it also affects the market value of the fruit.



The particulate film coating created by the Almina application created a temperature difference of about 7-8 degrees on the fruit surface and created a protective effect against sunburns and provided resistance to heat stress in the plant.

The temperature difference created by the application of Almina causes an increase in the amount of photosynthesis in 24 hours by delaying the plant's entry into heat stress and accelerating its exit. Therefore, a positive difference was observed in shoot and fruit development compared to the control plot.

It has been observed that the walnuts taken from the area where the almina application is applied are larger in size and have higher internal filling.

Thanks to its Almina Silicon content, it strengthens the cell walls of plants and thus makes them more resistant to various diseases and pests. This results in healthier trees and higher yields.

Almina increases the drought resistance of plants, including walnut trees. It improves the water use efficiency of trees by helping to regulate water intake and reducing transpiration. This makes Almina-treated walnut trees more durable in areas with limited water resources or during dry periods.