



האוניברסיטה העברית בירושלים
The Hebrew University of Jerusalem



המכון למדעי הצמח וגנטיקה בחקלאות ע"ש רוברט ה. סמית

THE ROBERT H. SMITH INSTITUTE OF PLANT SCIENCES AND GENETICS IN AGRICULTURE

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To whom it may concern

I visited the Tal-Ya Water Technologies Ltd. experimental plot during the lettuce growing period in winter 2008, and was impressed by the performance of plants grown in the Talya Dew Collector (TDC). While control plots froze completely during a severe one-off night frost event, plants grown in TDC remained healthy.

My analysis of the monitoring data shed light on the reasons responsible for the yield success. Soil surface temperatures remained above 3°C throughout the growing season, and moisture content in the soil remained at optimum field capacity.

Irrigated water savings were documented in a 50% to 90% range.

These features found in the Lettuce experiment repeated themselves with other crops: tomato, eggplant, pepper, watermelon, melon and butternut.

In addition, I visited a field experiment in the Lachish, Ministry of Agriculture Field Research Station where TDC was compared with standard plastic cover (mulch) as well as no soil cover at all. While the results are still being analyzed, my observations shed no doubt on the benefits of TDC over standard plastic mulch.

One of the single most outstanding attributes of the TDC that I have observed is that it can be used many times over, during multiple growing seasons, and once its working life ends, it can be collected and completely recycled. The standard plastic mulch used today by farmers is used for one growing season, and then usually collected and burnt, causing severe air pollution.

I have found TDC to be a promising implement in saving irrigated water, saving nutrient leaching, preventing salt accumulation on the soil surface as well as protecting against extreme weather conditions. I expect, with future use of TDC, that additional benefits will be discovered in reforestation in dry climate zones, new plantations of fruit trees and a decrease in the use of herbicides and soil applied pesticide to the benefit of the environment.


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