State of Israel/Ministry of Agriculture & Rural Development
Agricultural Research Organization
The Volcani Center
Office of the Director
Associate Director for Academic Affairs & International Cooperation

מדינת ישראל/משרד החקלאות ופיתוח הכפר מינהל המחקר החקלאי מרכז וולקני לשכת ראש המינהל ממונה על ענייני אקדמיה וקשרים בינלאומיים

## Program for Postdoctoral Fellowship Awards in Agriculture

| Internal Ref #  | Title of Research Project: Res<br>sugar metabolism | gulation of plant water balance by |
|---|--|------------------------------------|
| Project Leader: David Granot  |  | Email: granot@agri.gov.il          |
|   |  | Phone: 972-3-9683792               |
| Institute: Plant Sciences, The Volcani Center                                   |  |                                    |
| Department: Vegetable Research  |  |                                    |
| The research team (other scientists): Rakefet David Schwartz; Gilor Kelly, Ofer |  |                                    |
| Stein, Shlomo Goren. Collaborators: Menachem Moshelion, Sarah Assmann           |  |                                    |
| Short Description of Research Project (3-5 lines):                              |  |                                    |

We discovered novel roles for sugar metabolism genes in the regulation of stomata and water transport via aquaporins. Opposite to previous knowledge, sugar close stomata and minimize water loss. The molecular and physiological studies are performed with tomato and Arabidopsis plants.

These new results are not yet in press, but our other studies on sugar metabolism genes (hexokinases and fructokinases) and sugar sensing were published.

Required Qualifications of Visiting Scientist:

Education: Plant physiology and molecular biology.

Scientific Experience: Gene cloning, Gene expression analyses, Plant physiology

Abilities and Skills: Good personal interaction, Good English, High motivation, Good learning capabilities.





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