BARD Approved Projects
Award Year 2012

04/06/2012

IS-4480-12 **Evaluating and predicting water consumption by irrigated agriculture in the semi-arid regions of Israel and the U.S.: inverse biophysical modeling utilizing spaceborne imagery**

Ag Innov. & Eng. Tech.
App. Duration: 3 years

Karnieli, A.	Ben Gurion U	
French, A.N.	USDA, ARS	AZ
Bounoua, L.	NASA, Goddard	MD
Ben-Gal, A.	ARO, Min. Ag.	
Imhoff, M.	NASA, Goddard	MD

IS-4489-12F **Melanocortin signaling in fish: Investigation and utilization for increased food intake**

Animal Production
App. Duration: 1 year

Gothilf, Y.	Tel Aviv U	
Cone, R.	Vanderbilt U.	TN
Harpaz, S.	ARO, Min. Ag.	

IS-4493-12 **Delivery of gene silencing agents for improving aquaculture production efficiencies**

Animal Production
App. Duration: 3 years

Sagi, A.	Ben Gurion U	
Du, J.S-J.	U MD, Baltimore	MD
Zohar, Y.	UMBC	MD

IS-4499-12CR 8719 4393 **Multi-peptide control of puberty in fish and its application to aquaculture**

Animal Production
App. Duration: 3 years

Sivan-Levavi, B.	Hebrew U	
* Zmora, N.	UMBC	MD
Zohar, Y.	UMBC	MD
Gothilf, Y.	Tel Aviv U	

IS-4501-12 **Identification of new glycan metabolic pathways in the fungal pathogen *Botrytis cinerea* and their role in fungus-plant interactions**

Crop Health
App. Duration: 3 years

Sharon, A.	Tel Aviv U	
Bar-Peled, M.	U Georgia	GA

IS-4505-12R 4404 **Genetic and biochemical analysis of glucosinolate breakdown: The effects of indole-3-carbinol on plant physiology and development**

Crop Health
App. Duration: 3 years

Chamovitz, A.D.	Tel Aviv U	
Jander, G.	Boyce Thompson	NY

IS-4510-12C 4159 **A molecular link from PAMP perception to a MAPK cascade associated with tomato disease resistance**

Crop Health
App. Duration: 3 years

Sessa, G.	Tel Aviv U	
Martin, G.B.	Boyce Thompson	NY

IS-4513-12 **The role of RNA-dependent RNA polymerase 1 in plant virus defense**

Crop Health
App. Duration: 3 years

Gal-On, A.	ARO, Min. Ag.	
Ding, S.W.	UC, Riverside	CA
Gaba, V.P.	ARO, Min. Ag.	
Paris, H.S.	ARO, Min. Ag.	

IS-4523-12R 4424 **Elucidating the impact of enhanced conversion of primary to secondary metabolism on phenylpropanoids secondary metabolites associated with flavor, aroma and health in tomato fruits**

Crop Production
App. Duration: 3 years

Galili, G.	Weizmann Inst.	
Klee, H.J.	U Florida	FL
Aharoni, A.	Weizmann Inst.	

IS-4531-12C 4140 **Specific mediators of auxin activity during tomato leaf and fruit development**

Crop Production
App. Duration: 3 years

Ori, N.	Hebrew U	
Estelle, M.	UC, San Diego	CA

US-4535-12 **Regulation of growth habit in complex sympodial plants: Applying the tomato model to cotton**

Crop Production
App. Duration: 3 years

Ayre, B.G.	U No. Texas	TX
Lifschitz, E.	Technion	
Eshed, Y.	Weizmann Inst.	
Chapman, K.D.	U No. Texas	TX

IS-4536-12C 4249 **Shaping plant architecture by age dependent programs: implications for food, feed and biofuel**

Crop Production
App. Duration: 3 years

Eshed, Y.	Weizmann Inst.	
Hake, S.	USDA, ARS	CA

IS-4540-12 **The genetics of pod-filling in peanut under water-limiting conditions**

Crop Production
App. Duration: 3 years

* Hovav, R.	ARO, Min. Ag.	
Ozias-Akins, P.	U Georgia	GA
Jackson, S.A.	U Georgia	GA

IS-4541-12 **Novel regulation of transpiration by sugar signals within guard cells**

Crop Production
App. Duration: 3 years

Granot, D.	ARO, Min. Ag.	
Assmann, S.M.	Penn State U	PA

IS-4546-12R 4436 **Combining diversity within Sorghum bicolor for genomic and fine mapping of intra-allelic interactions underlying heterosis**

Crop Production
App. Duration: 3 years

Fridman, E.	Hebrew U	
Yu, J.	Kansas St. U	KS

US-4550-12 **Improving nitrogen availability indicators by emphasizing correlations between gross nitrogen mineralization and the quality and quantity of labile soil organic matter fractions**

Environ/Water/Ren. Res.
App. Duration: 3 years

* Castellano, M.J.	Iowa St. U	IA
Shaviv, A.G.	Technion	
Linker, R.	Technion	
Liebman, M.	Iowa St. U	IA

US-4551-12 **Environmental fate of antiepileptic drugs and their metabolites: Biodegradation, complexation, and photodegradation**

Environ/Water/Ren. Res.
App. Duration: 3 years

Borch, T.	Colorado St. U	CO
Hadar, Y.	Hebrew U	
Polubesova, T.	Hebrew U	

US-4561-12F **Genetic and transcriptomic analysis of postharvest decay resistance in *Malus sieversii* and the identification of pathogenicity effectors in *Penicillium expansum***

Food Product

App. Duration: 1 year

Wisniewski, M.E.	USDA, ARS	WV
Droby, S.	ARO, Min. Ag.	
Norelli, J.L.	USDA, ARS	WV
Prusky, D.	ARO, Min. Ag.	
Hershkovitz, V.	Hebrew U	

US-4571-12C 4073 **Elucidation of signaling pathways that regulate ethylene-induced leaf and flower abscission of agriculturally important plants**

Food Product

App. Duration: 3 years

Tucker, M.L.	USDA, ARS	MD
Meir, S.	ARO, Min. Ag.	
Lers, A.	ARO, Min. Ag.	
Philosoph-Hadas, S.	ARO, Min. Ag.	
Jiang, C.	USDA, ARS	CA

IS-4573-12R 4475 **Renewable, long-term, antimicrobial surface treatments through dopamine-mediated binding of peptidoglycan hydrolases**

Food Product

App. Duration: 3 years

* Rahimipour, S.	Bar Ilan U	
Donovan, D.	USDA, ARS	MD

* Indicates an early career scientist (less than 5 years from first institutional appointment)