BARD Approved Projects
Award Year 2019

06/06/2019

IS-5150-19 **Climate change and the dairy sector in Israel and the US**

Ag. Economics & Rural Devel.

App. Duration: 1 year

Fishman, R.	Tel Aviv U	
* Frank, E.	U Chicago	IL
Kimhi, A.	Hebrew U	

IS-5154-19 **Advanced framework for optimizing irrigation management and improving resource use efficiency**

Agricultural Innovation & Engi

App. Duration: 3 years

Linker, R.	Technion	
Kisekka, I.	UC, Davis	CA

US-5157-19 **Identification, characterization and testing of geographically conserved Babesia bovis vaccine antigen candidates**

Animal Health

App. Duration: 1 year

Ueti, W.	USDA, ARS	WA
Leszkowicz Mazuz, M.	Isr. Vet. Inst.	

IS-5164-19 **Mechanisms involved in pregnancy loss and maintenance of the corpus luteum during second month of gestation in lactating dairy cows**

Animal Production

App. Duration: 3 years

Moallem, U.	ARO, Min. Ag.	
Wiltbank, M.C.	U Wisconsin	WI

US-5165-19 **Utilization of fish processing waste enriched by fermentation in aquafeeds for fish of importance to Israel and USA**

Animal Production

App. Duration: 3 years

Dabrowski, K.	Ohio St. U	OH
Harpaz, S.	ARO, Min. Ag.	
Jimenez-Flores, R.	Ohio St. U	OH
Cnaani, A.	ARO, Min. Ag.	

IS-5167-19 **The role of the endocannabinoid system in regulating adipose tissue lipolysis and remodeling in postpartum dairy cows**

Animal Production

App. Duration: 3 years

* Zachut, M.	ARO, Min. Ag.	
Contreras, A.	Michigan St. U	MI
* Tam, J.	Hebrew U	

IS-5177-19 **Cutting edge culture independent pipeline for detection of novel anti-fungal plant protection compounds in suppressive soils**

Crop Health

App. Duration: 1 year

Cytryn, E.	ARO, Min. Ag.	
Brady, S.F.	U Rockefeller	NY
Frenkel, O.	ARO, Min. Ag.	

US-5179-19 **Elucidating the role of microbiome in host plant colonization and foraging of invasive fruit flies**

Crop Health

App. Duration: 3 years

* Wong, A.	U Florida	FL
Jurkevitch, E.	Hebrew U	
Yuval, B.	Hebrew U	

IS-5180-19 **Developing synthetic sex ratio distorters for the genetic control of the Mediterranean fruit fly and the New World screwworm**

Crop Health
App. Duration: 3 years

* Papathanos, P.	Hebrew U	
Scott, M.J.	N Carolina St. U	NC

US-5182-19R 5070 **The impacts and underlying mechanisms of carbon dioxide narcosis in bumble bees**

Crop Health
App. Duration: 3 years

* Amsalem, E.	Penn State U	PA
* Levin, E.	Tel Aviv U	
* Schilder, R.	Penn State U	PA

IS-5183-19 **New formulation for biopesticides based on single cell encapsulation via pickering emulsions**

Crop Health
App. Duration: 3 years

* Mechrez, G.	ARO, Min. Ag.	
Shapiro-Ilan, D.	USDA, ARS	GA
* Ment, D.	ARO, Min. Ag.	

IS-5188-19C 4744 **Genetic dissection of yield components in wheat using Pangenome and association study**

Crop Production
App. Duration: 3 years

Distelfeld, A.	Tel Aviv U	
Poland, J.	Kansas St. U	KS
Sela, H.	Tel Aviv U	

US-5191-19C 4916 **Validation of candidate genes for a QTL responsible for water stress tolerance and their diversity in wheat**

Crop Production
App. Duration: 3 years

Dubcovsky, J.	UC, Davis	CA
Fahima, T.	U Haifa	

IS-5195-19R 5104 **Developing new rooting enhancers and strategies for root regeneration from cuttings of pecan (Carya Illinoinensis) mature root-stocks**

Crop Production
App. Duration: 3 years

Sadot, E.	ARO, Min. Ag.	
Blancaflor, E.B.	Noble Research Institute, LLC	OK
* Weinstain, R.	Tel Aviv U	
Rohla, C.	Noble Research Institute, LLC	OK

IS-5196-19 **Genetic and physiological dissection of novel grain protein content QTLs from wild emmer wheat for nutritional improvement of wheat grains**

Crop Production
App. Duration: 3 years

Krugman, T.	U Haifa	
Beckles, D.	UC, Davis	CA
Bloom, A.J.	UC, Davis	CA

US-5202-19 **Elucidating and manipulating the CLAVATA-WUSCHEL circuit in cotton to understand meristem homeostasis in relation to fruit size and shape**

Crop Production
App. Duration: 3 years

Ayre, B.G.	U No. Texas	TX
Eshed-Williams, L.	Hebrew U	
Van der Knaap, E.	U Georgia	GA

IS-5205-19 **A general platform for designing synthetic operons for production of biofuels and other foreign pathways in algal chloroplasts**

Crop Production

App. Duration: 3 years

Yacoby, I.	Tel Aviv U	
Barkan, A.	U Oregon	OR

IS-5209-19 **Integrated wastewater treatment process for recovering high-quality irrigation water and nutrients**

Environ/Water/Ren. Res.

App. Duration: 3 years

Bernstein, R.	Ben Gurion U	
* Shihong, L.	Vanderbilt U.	TN
* Nir, O.	Ben Gurion U	

IS-5212-19R 5128 **Root exudates and rhizosphere nutrient transport: Improving plant nutrient-uptake models**

Environ/Water/Ren. Res.

App. Duration: 3 years

* Schwartz, N.	Hebrew U	
Neumann, R.B.	U Washington	WA

IS-5218-19 **Spatiotemporal decision support systems for recognizing variability and managing precision irrigation**

Environ/Water/Ren. Res.

App. Duration: 3 years

Ben-Gal, A.	ARO, Min. Ag.	
O'Shaughnessy, S.	USDA, ARS	TX
Cohen, Y.	ARO, Min. Ag.	
Colaizzi, D	USDA, ARS	TX
* Moorhead, J.E.	USDA, ARS	TX
Yasuor, H.	ARO, Min. Ag.	
Hansen, N.	Brigham Young U	UT
Hopkins, B.	Brigham Young U	UT
Heaton, M.	Brigham Young U	UT
Kerry, R.	Brigham Young U	UT
Jensen, R.R.	Brigham Young U	UT

IS-5221-19 **Integrated solution systems development for precision fertilizer management**

Environ/Water/Ren. Res.

App. Duration: 3 years

Litaor, M.	MIGAL R&D	
Ippolito, J.	Colorado St. U	CO
Shir, O.	MIGAL R&D	
Liran, O.	MIGAL R&D	
Reichman, O.	MIGAL R&D	
Khosla, R.	Colorado St. U	CO
Whitley, D.L.	Colorado St. U	CO

US-5222-19 **Application of metagenomic approaches to examine the virome in recycled waters for safe and sustainable reuse in irrigation**

Food Product

App. Duration: 3 years

Betancourt, W.Q.	U Arizona	AZ
BarOr, I.	Sheba - Tel Hashomer	
* Zuckerman, N.S.	Sheba - Tel Hashomer	
Bright, K.R.	U Arizona	AZ

IS-5223-19C Food Product
4125

Enhancement of tomato flavor by upregulating the mono- and sesquiterpene biosynthetic pathways using genes from wild tomato relatives

App. Duration: 3 years

Lewinsohn, E.	ARO, Min. Ag.	
Dudareva, N.	Purdue	IN
Sitrit, Y.	Ben Gurion U	
Schaffer, A.	ARO, Min. Ag.	

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