BARD Approved Projects
2019 - 2022

02/06/2022

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

Ag. Economics & Rural Devel.

App. Duration: 2 years

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: 2 years

Ueti, M.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.	U Ohio St.	OH
Harpaz, S.	ARO, Min. Ag.	
Jimenez-Flores, R.	U Ohio St.	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.	U Michigan St.	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: 2 years

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.	U NC State	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.	U Penn State	PA
* Levin, E.	Tel Aviv U	
* Schilder, R.	U Penn State	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.	U Haifa	
Friebe, B.	Kansas State U	KS
Sela, H.	Tel Aviv U	
Poland, J.	Kansas State U	KS

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.	
Staiger, C.J.	U Purdue	IN
* Weinstain, R.	Tel Aviv U	
Blancaflor, E.B.	Noble Research Institute, LLC	OK
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.M.	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 N. 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.	U Vanderbilt	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, P.	USDA, ARS	TX
* Moorhead, J.E.	USDA, ARS	TX
Yasuor, H.	ARO, Min. Ag.	
Hansen, N.	U Brigham Young	UT
Hopkins, B.	U Brigham Young	UT
Heaton, M.	U Brigham Young	UT
Kerry, R.	U Brigham Young	UT
Jensen, R.R.	U Brigham Young	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.	U Colorado St.	CO
Shir, O.	MIGAL R&D	
Liran, O.	MIGAL R&D	
Reichman, O.	MIGAL R&D	
Khosla, R.	Kansas State U	KS
Whitley, D.L.	U Colorado St.	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 4125
Enhancement of tomato flavor by upregulating the mono- and sesquiterpene biosynthetic pathways using genes from wild tomato relatives
Food Product
App. Duration: 3 years

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

US-5231-20CR 4986 5152
Sustainable agriculture: The case of macroalgal-based circular economy
Ag. Economics & Rural Devel.
App. Duration: 3 years

Zilberman, D.	UC, Berkeley	CA
Palatnik, R.	Yezreel Valley College	
* Golberg, A.	Tel Aviv U	

US-5236-20
Open field agrivoltaics with an innovative spectral beam splitting solar collector
Agricultural Innovation & Engi
App. Duration: 3 years

* Hernandez, R.	U NC State	NC
* Vitoshkin, H.	ARO, Min. Ag.	
Kribus, A.	Tel Aviv U	
Mittelman, G.	ARO, Min. Ag.	

IS-5241-20
Beta-glucans as growth promoters and antibiotic alternatives in poultry
Animal Health
App. Duration: 3 years

Schwartz, B.	Hebrew U	
Vetvicka, V.	U Louisville	KY
Rozenboim, I.	Hebrew U	

IS-5242-20
Development of *Salmonella* sensing-based antibacterials for use in poultry
Animal Health
App. Duration: 3 years

* Mills, E.	Hebrew U	
* Petersen, E.M.	U E Tenn State	TN

IS-5248-20
EGF/EGFR signaling in the southern flounder male reproductive system and its role in regulating sperm motility and fertility
Animal Production
App. Duration: 3 years

* Aizen, Y.	Ruppin Academic Center	
Thomas, P.	U Texas at Austin	TX

IS-5255-20
Benefits of *Moringa oleifera*, an antioxidant rich feed, on improving ruminants production efficiency and product quality
Animal Production
App. Duration: 3 years

Cohen-Zinder, M.	ARO, Min. Ag.	
Raskin, I.	U Rutgers	NJ
Shabtay, A.	ARO, Min. Ag.	

IS-5257-20CF 4899
Feasibility Study: Using *in vitro* embryo production and gene editing to study embryology in sheep
Animal Production
App. Duration: 1 year

Gershon, E.	ARO, Min. Ag.	
Ealy, A.	Virginia Tech	VA

IS-5261-20C 4937
The role of Botrytis necrosis-inducing proteins as plant immunogens, and their potential use in plant protection
Crop Health
App. Duration: 3 years

Sharon, A.	Tel Aviv U	
Mengiste, T.D.	U Purdue	IN

US-5264-20 **Elucidating how durable disease resistance curtails fungal infection in maize using deep-learning facilitated microscopy**

Crop Health
App. Duration: 3 years

Caplan, J.	U Delaware	DE
Horwitz, B.	Technion	
Wisser, R.J.	U Delaware	DE

US-5265-20 **Gene discovery to enhance potato resistance to Colorado potato beetle**

Crop Health
App. Duration: 3 years

Jander, G.	Boyce Thompson	NY
Aharoni, A.	Weizmann Inst.	

IS-5270-20R 5176 **Targeting the structural Glycoprotein N (Gn) of Tomato Spotted Wilt Virus (TSWV) to inhibit virus acquisition by thrips**

Crop Health
App. Duration: 3 years

Dessau, M.	Bar Ilan U	
Whitfield, A.E.	U NC State	NC

IS-5274-20 **Elucidating the cross-talk between root microstructure and soilborne pathogens**

Crop Health
App. Duration: 2 years

* Kleiman, M.	ARO, Min. Ag.	
Iyer-Pascuzzi, A.S.	U Purdue	IN

IS-5276-20 **Dissecting genetic resistance to Tomato brown rugose fruit virus (ToBRFV), the emerging tomato pathogen**

Crop Health
App. Duration: 3 years

Lapidot, M.	ARO, Min. Ag.	
Citovsky, V.	NYSU, Stony Brook	NY

IS-5283-20 **Understanding the interplay between TYLCV resistance and heat tolerance in tomato**

Crop Production
App. Duration: 3 years

Gorovits, R.	Hebrew U	
Strickler, S.R.	Boyce Thompson	NY
Czosnek, H.H.	Hebrew U	
Menda, N.	Boyce Thompson	NY

IS-5284-20 **Comparative genomic and genetic analyses of carbohydrate accumulation in winter squash and melon fruit**

Crop Production
App. Duration: 3 years

* Gur, A.	ARO, Min. Ag.	
Mazourek, M.	U Cornell	NY
Burger, J.	ARO, Min. Ag.	
Tadmor, Y.	ARO, Min. Ag.	
Schaffer, A.	ARO, Min. Ag.	

IS-5288-20 **Incorporation winter tree physiology into forecast-models of orchards bloom and yield**

Crop Production
App. Duration: 3 years

* Paz-Kagan, T.	ARO, Min. Ag.	
Zwieniecki, M.	UC, Davis	CA
* Sperling, O.	ARO, Min. Ag.	

IS-5292-20R 5192 **Next-generation basil: Mapping chilling-tolerance in sweet basil using next-generation sequencing for a long-lasting product**

Crop Production
App. Duration: 1 year

* Gonda, I.	ARO, Min. Ag.	
Simon, J.E.	U Rutgers	NJ
Dudai, N.	ARO, Min. Ag.	
Wyenandt, C.A.	U Rutgers	NJ
Kenigsbuch, D.	ARO, Min. Ag.	
Faigenboim, A.	ARO, Min. Ag.	

IS-5299-20 **smaRt dEsalination System fOr sUstainable agRiCultural usE (RESOURCE)**

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

Lazarovitch, N.	Ben Gurion U	
Cohen, Y.	UC, Los Angeles	CA
Gilron, J.	Ben Gurion U	
Trippler, E.	Central & Northern Arava R&D	

IS-5304-20 **Optimal irrigation strategies informed by direct tree-water storage measurements**

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

* Mau, Y.	Hebrew U	
Bohrer, G.	U Ohio St.	OH

IS-5309-20R 5219 **Thermochemical processing of agricultural plastic waste for resource recovery and sustainable development**

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

* Posmanik, R.	ARO, Min. Ag.	
Goldfarb, J.L.	U Cornell	NY
Sills, D.	U Bucknell	PA
Dubowski, Y.	Technion	

IS-5315-20 **Integrating water treatment with nutrient utilization in intensive aquaculture by a new microaerophilic membrane assimilation reactor system**

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

* Bar-Zeev, E.	Ben Gurion U	
* Perreault, F.	U Arizona St.	AZ
Herzberg, M.	Ben Gurion U	
Zilberg, D.	Ben Gurion U	

IS-5317-20C 5038 **Cold induced sweetening as a trigger for endodormancy release of potato seed tubers**

Food Product
App. Duration: 3 years

Eshel, D.	ARO, Min. Ag.	
Jiang, J.	U Michigan St.	MI

IS-5321-20C 4783 **The genetic basis for postharvest chilling tolerance in tomato fruit**

Food Product
App. Duration: 3 years

Lers, A.	ARO, Min. Ag.	
Foolad, M.R.	U Penn State	PA
Fallik, E.	ARO, Min. Ag.	

IS-5323-20C 5042 **Epigenetic mechanisms controlling mycotoxin biosynthesis and pathogenesis in the plant pathogen *Penicillium expansum***

Food Product
App. Duration: 3 years

Sionov, E.	ARO, Min. Ag.	
Keller, N.P.	U Wisconsin	WI

US-5335-21 **Developing mechanical harvesting and improving postharvest treatment of California and Israel's table olive (*Olea europaea L.*)**

Agricultural Innovation & Engi
App. Duration: 3 years

Ehsani, R.	UC, Merced	CA
Dag, A.	ARO, Min. Ag.	
Ferguson, L.	UC, Davis	CA
Fishman, A.	Technion	

US-5336-21 **Mitigation of clogging in drip-irrigation emitters: A hydrodynamic approach**

Agricultural Innovation & Engi
App. Duration: 3 years

Sauret, A.O.	UC, St.Barbara	CA
Ramon, G.	Technion	

US-5343-21 **Elucidating carp responses and virulence strategies during CyHV-3 infection of hosts with different susceptibility patterns**

Animal Health
App. Duration: 3 years

* Gorgoglione, B.	U Michigan St.	MI
David, D.L.	Hebrew U	

IS-5354-21 **Mitigation of off flavor in recirculating aquaculture systems**

Animal Production
App. Duration: 3 years

Van Rijn, J.	Hebrew U	
Davidson, J.W.	Freshwater Inst.	WV

IS-5358-21 **Elucidating and manipulating regulatory elements of the tilapia physiological response to extreme temperatures**

Animal Production
App. Duration: 3 years

Cnaani, A.	ARO, Min. Ag.	
Kueltz, D.	UC, Davis	CA
* Biran, J.	ARO, Min. Ag.	

US-5361-21 **Understanding the Citrus tristeza virus interplay with plant immunity for disease control**

Crop Health
App. Duration: 1 year

Folimonova, S.Y.	U Florida	FL
Mawassi, M.	ARO, Min. Ag.	

IS-5362-21CR 4931 5263 **Tomato PP2C phosphatases: negative regulators of plant immunity and biotechnological tools for enhancement of disease resistance**

Crop Health
App. Duration: 3 years

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

IS-5386-21R 5271 **Deciphering the resistance-breaking mechanism of Tomato brown rugose fruit virus**

Crop Health
App. Duration: 3 years

* Spiegelman, Z.	ARO, Min. Ag.	
Dinesh-Kumar, S.P.	UC, Davis	CA

US-5389-21C 5029 **Gene discovery through systems biology approaches to develop broad-spectrum antiviral strategies in crops**

Crop Health
App. Duration: 3 years

Wang, X.F.	Virginia Tech	VA
Schuldiner, M.	Weizmann Inst.	

US-5390-21 **Adapting soil biosolarization to local by-products and low water inputs by harnessing the indigenous microbiome in lettuce crops**

Crop Health
App. Duration: 3 years

Simmons, C.	UC, Davis	CA
Freilich, S.	ARO, Min. Ag.	
Stapleton, J.J.	UC, ANR	CA

IS-5393-21 **Wild plasmotype diversity for evolving and breeding abiotic stress resilience in barley**

Crop Production
App. Duration: 3 years

Fridman, E.	ARO, Min. Ag.	
Koenig, D.	UC, Riverside	CA
Lenaghan, S.	U Tennessee, Knoxville	TN

IS-5400-21 **Leveraging genomics and temporal high-throughput phenotyping to enhance association mapping and yield prediction of sesame**

Crop Production
App. Duration: 3 years

Peleg, Z.	Hebrew U	
Morota, G.	Virginia Tech	VA
* Herrmann, I.	Hebrew U	

IS-5403-21CR 4822 5291 **Elucidating the genes that are involved in the biosynthetic pathway of hydrolyzable tannins in pomegranate**

Crop Production
App. Duration: 3 years

Amir, R.	MIGAL R&D	
Tian, L.	UC, Davis	CA
Holland, D.	ARO, Min. Ag.	

IS-5430-21 **Tree-based multilevel spatial decision support systems to close the yield gap in almond orchards**

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

* Baram, S.	ARO, Min. Ag.	
Jin, Y.	UC, Davis	CA
* Paz-Kagan, T.	ARO, Min. Ag.	
Brown, P.H.	UC, Davis	CA

US-5434-21 **Unraveling the biogeochemical mechanisms of drought and rewetting induced nitric and nitrous oxide emissions from dryland agriculture**

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

* Saha, D.	U Tennessee, Knoxville	TN
* Gelfand, I.	Ben Gurion U	
Schaeffer, S.M.	U Tennessee, Knoxville	TN
* Jagadamma, S.M.	U Tennessee, Knoxville	TN

US-5439-21 **Nutrient recovery in recirculating aquaculture systems: From waste to fertilizer**

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

Sengupta, S.	U of Mass at Dartmouth	MA
* Tal, S.	Isr. Ocean. Res.	
* Yogev, U.	Isr. Ocean. Res.	

IS-5443-21R 5298 **Foliar fertilization with insoluble phosphate: exploration of chemical, structural, and microbial processes that facilitate P acquisition**

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

* Erel, R.	ARO, Min. Ag.	
Leveau, J.	UC, Davis	CA
Gross, A.	Ben Gurion U	

IS-5444-21 **Controlling postharvest fruit decay by antifungal defensin-like peptides**

Food Product

App. Duration: 3 years

Alkan, N.	ARO, Min. Ag.	
Shah, D.	Danforth Center	MO

IS-5451-21 **Leading the way to the future of gas chromatography - mass spectrometry in food safety analysis**

Food Product

App. Duration: 3 years

Amirav, A.	Tel Aviv U	
Lehotay, S.J.	USDA, ARS	PA

IS-5455-21 **The functional microbiome of apple fruit and its interplay with the host metabolome and postharvest pathogens**

Food Product

App. Duration: 3 years

Droby, S.	ARO, Min. Ag.	
* Whitehead, S.R.	Virginia Tech	VA
Freilich, S.	ARO, Min. Ag.	
Wisniewski, M.E.	Virginia Tech	VA

IS-5465-22CR 5001 5347 **Disrupting the signal: characterization and inhibition of host-parasite sensing apparatus**

Animal Health

App. Duration: 3 years

Lotan, T.	U Haifa	
Atkinson, S.	U Oregon St.	OR
Bartholomew, J.	U Oregon St.	OR

IS-5469-22R 5345 **Does Honey Bee Hygienic Behavior Curtail or Enhance Virus Transmission**

Animal Health

App. Duration: 3 years

Soroker, V.	ARO, Min. Ag.	
Schroeder, D.	U Minnesota	MN
Spivak, M.	U Minnesota	MN

IS-5474-22R 5351 **Morphokinetic selection of embryos for an embryo-transfer system to improve summer fertility of dairy cows**

Animal Production

App. Duration: 1 year

Roth, Z.	Hebrew U	
Hansen, P.J.	U Florida	FL
Marcondes de Rezende, F	U Florida	FL

IS-5478-22 **Manipulating dietary sodium and anions to reduce the environmental impacts of dairy cattle: sodium excretion and ammonia emission from manure**

Animal Production

App. Duration: 3 years

* Ben Meir, Y.	ARO, Min. Ag.	
Lee, C.	U Ohio St.	OH

IS-5479-22C 4995 **Utilization of periphyton biofilter for water treatment and recovery of waste nutrients in recirculating aquaculture systems for intensive production of marine fish**

Animal Production

App. Duration: 3 years

Guttman, L.	Isr. Ocean. Res.	
Main, K. L.	Mote	FL
* Tarnecki, A.	Mote	FL
Brennan, N.	Mote	FL

IS-5482-22 **Exploring thyroid hormones and GHRH as tools for manipulating growth and puberty in female fish**

Animal Production

App. Duration: 3 years

* Golan, M.	ARO, Min. Ag.	
Zmora, N.	UMBC	MD
Levavi-Sivan, B.	Hebrew U	
Zohar, Y.	UMBC	MD

IS-5486-22CR 5023 5367 **A holistic approach towards development of bacterial fruit blotch resistance in cucurbits**

Crop Health

App. Duration: 3 years

Burdman, S.	Hebrew U	
Walcott, R.	U Georgia	GA
Zhao, B.	Virginia Tech	VA
Welbaum, E	Virginia Tech	VA

IS-5492-22R 5366 **Co-opting fungal cell death pathways for disease control in agriculture**

Crop Health

App. Duration: 3 years

Shlezinger, N.	Hebrew U	
Kabbage, M.	U Wisconsin	WI

IS-5497-22 0 **Targeting Core RxLR-like effectors of phytonematodes to control root knot nematode disease**

Crop Health

App. Duration: 1 year

Braun Miyara, S.	ARO, Min. Ag.	
Gleason, C.	U WA State	WA
Sela, N.	ARO, Min. Ag.	

IS-5499-22 **Effector proteases from *Clavibacter:* identification of plant immune receptors and investigating their influence on host specificity in Solanaceae**

Crop Health

App. Duration: 3 years

* Teper, Doron	ARO, Min. Ag.	
Coaker, G.L.	UC, Davis	CA

IS-5502-22C 5033 **ABC transporters as potential targets for virulence inhibition in soft rot pectobacteria**

Crop Health

App. Duration: 3 years

Yedidia, I.	ARO, Min. Ag.	
Charkowski, A.O.	U Colorado St.	CO
Senderowitz, H.	Bar Ilan U	

IS-5510-22R 5402 **Developing predictive indicators of reproductive heat stress tolerance in tomato plants**

Crop Production

App. Duration: 3 years

Miller, G.	Bar Ilan U	
Palanivelu, R.	U Arizona	AZ
* Lieberman-Lazarovich,	ARO, Min. Ag.	
Muday, G.K.	U Wake Forest	NC
Johnson, M.A.	U Brown	RI
Harper, J.F.	U Nevada	NV

IS-5512-22 **Resilient sweetpotato yield and quality in face of climate change - root architectural traits for consistent storage root formation under drought**

Crop Production

App. Duration: 3 years

Rachmilevitch, S.	Ben Gurion U	
Villordon, A.Q.	LSU, Ag Center	LA
Baisakh, N.	LSU, Ag Center	LA
LaBonte, D.R.	LSU, Ag Center	LA
Ilani, T.	Southern R&D	

US-5515-22C 5191 **Molecular characterization and natural variation of 12-oxophytodienoate reductases that modulate wheat root architecture** — Crop Production; App. Duration: 3 years

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

IS-5516-22 **Regulation of stomata function, ROS formation, water use efficiency and drought tolerance in tomato by ROP GTPase signaling** — Crop Production; App. Duration: 3 years

Yalovsky, S.	Tel Aviv U	
Schroeder, J.I.	UC, San Diego	CA
* Sade, N.	Tel Aviv U	

IS-5519-22 **Utilizing citrullus spp. genetic resources for enhancing abiotic tolerance in watermelon cultivars** — Crop Production; App. Duration: 3 years

* Cochavi, A.	ARO, Min. Ag.	
Levi, A.	USDA, ARS	SC
Gur, A.	ARO, Min. Ag.	
Fei, Z.	Boyce Thompson	NY

IS-5524-22 **Development of novel approaches to improve fruit quality and shelf-life via tailored and targeted manipulation of cytokinin levels** — Crop Production; App. Duration: 3 years

* Goldshmidt, A.	ARO, Min. Ag.	
Rose, J.K.	U Cornell	NY

IS-5537-22R 5407 **Short term drought-tolerance inducing rhizobacteria (STDiR): a potential for water stress amelioration in wheat** — Environ/Water/Ren. Res.; App. Duration: 3 years

Minz, D.	ARO, Min. Ag.	
Green, S.J.	U Rush	IL
Ben-David, R.	ARO, Min. Ag.	
Hadar, Y.	Hebrew U	

US-5545-22R 5437 **Sharing a lignocellulosic dish: exploiting a bi-fungal consortium and its interacting mechanisms for agricultural residues conversion** — Environ/Water/Ren. Res.; App. Duration: 3 years

* Zhang, J.	U Minnesota	MN
Hadar, Y.	Hebrew U	
Yarden, O.	Hebrew U	

US-5548-22R 5440 **Remote sensing of wine-grapevine transpiration for improving vine water status** — Environ/Water/Ren. Res.; App. Duration: 3 years

Alfieri, J.G.	USDA, ARS	MD
Agam, N.	Ben Gurion U	
Torres-Rua, A.	U Utah St.	UT
Kustas, W.	USDA, ARS	MD
Karnieli, A.	Ben Gurion U	

IS-5553-22 **Regulating Ripening and Chilling Tolerance of Tomato Fruits Through Autophagy Modulation**

Food Product

App. Duration: 3 years

* Michaeli, S. ARO, Min. Ag.
Mattoo, A.K. USDA, ARS MD

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