

BARD Approved Projects
2015 - 2018
Agric Innovation and Engineering

US-4791-15R	Development of a universal volatile compound detection technology	App. Duration: 1 year
4694	for early recognition of pests and diseases in fruit trees	
	Davis, C. UC, Davis CA	
	Hetzroni, A. ARO, Min. Ag.	
	Aksenov, A. UC, Davis CA	
	Delwiche, M.J. UC, Davis CA	
	Soroker, V. ARO, Min. Ag.	
	Alchanatis, V. ARO, Min. Ag.	
US-4884-16	Closing the nutrient cycle through sustainable agricultural waste management	App. Duration: 3 years
	Sengupta, S. U of Mass at MA	
	Dartmouth	
	Lew, B. ARO, Min. Ag.	
	Blaney, L. UMBC MD	
US-4885-16	Improving sustainability of greenhouse production using semi-transparent flexible photovoltaic films	App. Duration: 3 years
	Kacira, M. U Arizona AZ	
	Teitel, M. ARO, Min. Ag.	
	Yehia, I. Triangle R&D	
	Geoola, F. ARO, Min. Ag.	
	Levi, A. ARO, Min. Ag.	
	Gnayem, N. Triangle R&D	
	Kubota, C. U Arizona AZ	
IS-4886-16R	Development of a robotic inspection system for early identification	App. Duration: 3 years
4787	and locating of biotic and abiotic stresses in greenhouse crops	
	Bechar, A. ARO, Min. Ag.	
	Nof, S.Y. Purdue IN	
	Tao, Y. U Maryland MD	
US-4991-17	Using remote sensing to develop dynamic irrigation management zones	App. Duration: 3 years
	Snider, J.L. U Georgia GA	
	Cohen, Y. ARO, Min. Ag.	
	Vellidis, G. U Georgia GA	
	Saranga, Y. Hebrew U	
	Porter, M. U Georgia GA	
	Perry, C. U Georgia GA	
	Liakos, V. U Georgia GA	
	Levi, A. ARO, Min. Ag.	
	Shaked, B. ARO, Min. Ag.	
	Rosenfeld, L. ARO, Min. Ag.	
	Lidor, G. ARO, Min. Ag.	
	Keisar, O. ARO, Min. Ag.	
IS-5060-18	Dual mode detection of heavy metal pollutants: A real-time biosensing method	App. Duration: 1 year
	Shtenberg, G. ARO, Min. Ag.	
	Minteer, S.D. U Utah UT	

**BARD Approved Projects
2015 - 2018
Animal Health and Invasive Species**

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IS-4903-16C 4583	Diagnostics and vaccines for containment of TiLV - a novel RNA virus lethal to <i>Tilapia</i> Bacharach, E. Tel Aviv U Lipkin, W.I. Columbia U NY Eldar, A. Isr. Vet. Inst.	App. Duration: 3 years
IS-4905-16R 4804	Identification of virulence-associated genes in <i>Mycobacterium avium subsp. paratuberculosis</i> by mutant-library construction Barkan, D. Hebrew U Chang, Y.F. Cornell U NY McDonough, L Cornell U NY Fubini, S. Cornell U NY Gleed, R. Cornell U NY	App. Duration: 2 years
IS-5001-17C 4576	A proteomics and transcriptomics study into Myxozoan parasite infection mechanisms Lotan, T. U Haifa Atkinson, S. Oregon St. U OR Bartholomew, J. Oregon St. U OR	App. Duration: 3 years
IS-5005-17R 4904	Novel vaccination strategies to combat chicken arthritis/tenosynovitis reoviruses in US and Israel Lublin, A. Isr. Vet. Inst. Goyal, S.M. U Minnesota MN Porter, E. U Minnesota MN Ly, H. U Minnesota MN Farnoushi, Y. Isr. Vet. Inst. Mor, S. U Minnesota MN	App. Duration: 3 years
IS-5066-18R 5004	Identification of virulence mechanisms in mammary pathogenic <i>Mycoplasma bovis</i> using unbiased whole genome random mutagenesis Lysnyansky, I. Isr. Vet. Inst. Almeida, R. U Tennessee, TN Knoxville Shpigel, N. Hebrew U Kerro-Dego, O. U Tennessee, TN Knoxville	App. Duration: 3 years
IS-5067-18	Treatment and prevention of mastitis in dairy cows using cell based therapy Schlesinger, S. Hebrew U Lippolis, J.D. USDA, ARS IA Shpigel, N. Hebrew U	App. Duration: 1 year

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2015 - 2018
Animal Production**

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IS-4794-15R	Determination of actual polymorphisms responsible for economic trait variation in dairy cattle	App. Duration: 3 years
4707	<p>Weller, J.I. ARO, Min. Ag.</p> <p>Bickhart, D.M. USDA, ARS MD</p> <p>Ron, M. ARO, Min. Ag.</p> <p>Seroussi, E. ARO, Min. Ag.</p> <p>Liu, G. USDA, ARS MD</p> <p>Wiggans, G.R. USDA, ARS MD</p>	
IS-4799-15	Mechanisms involved in rescue of the corpus luteum during early pregnancy in lactating dairy cows	App. Duration: 3 years
	<p>Meidan, R. Hebrew U</p> <p>Wiltbank, M.C. U Wisconsin WI</p>	
IS-4800-15R	Optimization of tilapia nutrition by understanding the mechanistic basis of amino-acid/peptide transport in their gut	App. Duration: 3 years
4711	<p>Cnaani, A. ARO, Min. Ag.</p> <p>Kueltz, D. UC, Davis CA</p> <p>Harpaz, S. ARO, Min. Ag.</p>	
IS-4801-15C	Uncovering rumen microbiome components shaping feed efficiency in dairy cows	App. Duration: 3 years
4390	<p>Mizrahi, I. Ben Gurion U</p> <p>White, B.A. U Illinois IL</p>	
IS-4892-16CR	Genetic manipulations of MC4R for increased growth and feed efficiency in fish	App. Duration: 3 years
4489 4795	<p>Gothilf, Y. Tel Aviv U</p> <p>Cone, R. U Michigan MI</p> <p>Levavi-Sivan, B. Hebrew U</p> <p>Harpaz, S. ARO, Min. Ag.</p>	
IS-4899-16R	Fibroblast growth factor signaling requirements for embryonic and placental development in ruminants	App. Duration: 1 year
4803	<p>Gershon, E. ARO, Min. Ag.</p> <p>Ealy, A. Virginia Tech VA</p>	
IS-4995-17R	Use of plant based biofilters to create sustainable mariculture systems	App. Duration: 3 years
4981	<p>Guttman, L. Isr. Ocean. Res.</p> <p>Main, K. L. Mote FL</p> <p>Brennan, N. Mote FL</p> <p>Tarnecki, A. Mote FL</p> <p>Shpigel, M. Isr. Ocean. Res.</p>	
US-4997-17	Genetic analyses of recombination and PRDM9 alleles and their implications in dairy cattle breeding	App. Duration: 3 years
	<p>Liu, G. USDA, ARS MD</p> <p>Seroussi, E. ARO, Min. Ag.</p> <p>Ma, L. U Maryland MD</p>	

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Animal Production**

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US-5000-17R	Genotypes and phenotypes of telomere length in Holstein cattle:	App. Duration: 3 years
4897	Actors or reporters	
	Dechow, C.D. Penn State U PA	
	Shabtay, A. ARO, Min. Ag.	
	Tzfati, Y. Hebrew U	
	Ott, T. Penn State U PA	
	Soller, M. Hebrew U	
	Liu, W. Penn State U PA	
	Cohen-Zinder, M. ARO, Min. Ag.	
	Lipkin, E. Hebrew U	
US-5074-18CR	Modulating intestinal cellular maturation and differentiation in broilers by in ovo feeding	App. Duration: 3 years
4113	4992	
	Wong, E.A. Virginia Tech VA	
	Uni, Z. Hebrew U	
IS-5077-18R	The regulation of size related division of labor in a key pollinator and its impact on crop pollination efficacy	App. Duration: 3 years
5003		
	Bloch, G. Hebrew U	
	Woodard, H.S. UC, Riverside CA	
IS-5078-18	Characterization of the architecture of hygienic behavior of honeybees to enable breeding for improved honeybee health	App. Duration: 3 years
	Soroker, V. ARO, Min. Ag.	
	Rueppell, O. U NC Greensboro NC	

**BARD Approved Projects
2015 - 2018
Crop Health and Invasive Species**

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US-4833-15C 4414	Characterization of the chorismate mutase effector (SsCm1) from <i>Sclerotinia sclerotiorum</i> Dickman, M.B. TX AgriLife Res TX Yarden, O. Hebrew U	App. Duration: 3 years
US-4839-15FR 4614	The role of asymptomatic secondary hosts in the epidemiology of <i>Verticillium</i> wilt Milgroom, M.G. Cornell U NY Frenkel, O. ARO, Min. Ag. Tsrer, L. ARO, Min. Ag. Jimenez-Gasco, M.d.M. Penn State U PA	App. Duration: 1 year
IS-4841-15F	Novel strategies and methodologies to control and study <i>Candidatus Liberibacter</i> diseases Bahar, O. ARO, Min. Ag. De La Fuente, L. Auburn U AL Falk, B. W. UC, Davis CA Sela, N. ARO, Min. Ag.	App. Duration: 1 year
IS-4842-15R 4719	Proteomic investigation of a tomato receptor like protein recognizing fungal pathogens Avni, A. Tel Aviv U Coaker, G.L. UC, Davis CA	App. Duration: 3 years
US-4846-15C 4505	Investigation of growth regulation by maize benzoxazinoid breakdown products Jander, G. Boyce Thompson NY Chamovitz, A.D. Tel Aviv U	App. Duration: 3 years
IS-4931-16C 4510	The role of FLS3 and BSK830 in pattern-triggered immunity in tomato Sessa, G. Tel Aviv U Martin, G.B. Boyce Thompson NY	App. Duration: 3 years
IS-4932-16	Fungal-specific histone deacetylase inhibitors, novel players in combating pathogenic fungi Covo, S. Hebrew U Ma, L.J. U Mass MA	App. Duration: 3 years
IS-4937-16	Molecular dissection of host and pathogen factors in <i>Botrytis cinerea</i> pathogenesis for improved genetic resistance Sharon, A. Tel Aviv U Mengiste, T.D. Purdue IN	App. Duration: 3 years
US-4947-16R 4838	Basil gene pool enrichment for <i>Downy Mildew</i> resistance and QTL development using genotyping by sequencing Simon, J.E. Rutgers NJ Cohen, Y. Bar Ilan U	App. Duration: 3 years
IS-4953-16	The molecular mechanism for the <i>Tomato yellow leaf curl virus</i> resistance at the ty-5 locus Lapidot, M. ARO, Min. Ag. Citovsky, V. NYSU, Stony Brook NY	App. Duration: 3 years

Crop Health and Invasive Species

IS-5023-17C 4734	Bacterial fruit blotch: Elucidating the mechanisms of fruit infection by <i>Acidovorax citrulli</i> Burdman, S. Hebrew U Walcott, R. U Georgia GA Zhao, B. Virginia Tech VA Welbaum, E. Virginia Tech VA	App. Duration: 3 years
IS-5024-17R 4944	Identifying unique and overlapping roles of reactive oxygen species in rice blast and Southern corn leaf blight Horwitz, B. Technion Donofrio, M. U Delaware DE	App. Duration: 3 years
IS-5027-17C 4513	The role and control of the RNA-dependent RNA polymerase 1 gene family in cucumber virus defense Gal-On, A. ARO, Min. Ag. Ding, S.W. UC, Riverside CA	App. Duration: 3 years
US-5029-17	Systems biology approaches to dissect virus-host interactions to develop crops with broad-spectrum virus resistance Wang, X.F. Virginia Tech VA Schuldiner, M. Weizmann Inst.	App. Duration: 3 years
IS-5033-17	Small molecule cocktails designed to impair virulence targets in soft rot <i>Erwinias</i> Yedidia, I. ARO, Min. Ag. Charkowski, A.O. Colorado St. U CO Senderowitz, H. Bar Ilan U	App. Duration: 3 years
IS-5085-18	Targets for CRISPR/Cas9-mediated gene drive in <i>Bemisia tabaci</i>: A strategy for controlling a global pest Morin, S. Hebrew U Walling, L.L. UC, Riverside CA Atkinson, P.W. UC, Riverside CA Li, J. UC, Riverside CA Tabashnik, B.E. U Arizona AZ	App. Duration: 3 years
IS-5087-18R 5025	Cloning and characterization of a novel leaf rust and stripe rust resistance gene from Sharon goatgrass Minz-Dub, A. Tel Aviv U Muehlbauer, G.J. U Minnesota MN Millet, E. Tel Aviv U Sharon, A. Tel Aviv U	App. Duration: 3 years
US-5089-18	Cloning and comparative sequence analysis of powdery mildew and leaf rust resistance gene complements in wild barley Steffenson, B.J. U Minnesota MN Mayrose, I. Tel Aviv U Muehlbauer, G.J. U Minnesota MN Sharon, A. Tel Aviv U	App. Duration: 3 years
US-5090-18F	Novel nematode-derived insecticidal proteins for pest control Dillman, A.R. UC, Riverside CA Ment, D. ARO, Min. Ag.	App. Duration: 1 year

BARD Approved Projects
2015 - 2018
Crop Health and Invasive Species

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IS-5092-18R **Identifying molecular markers for defense metabolites against aphid**
5035 feeding in wild emmer wheat

App. Duration: 3 years

Tzin, V.	Ben Gurion U	
Dilkes, B.	Purdue	IN
Sela, H.	Tel Aviv U	

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Crop Production**

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US-4813-15C 4429	DELLA, ABA and drought tolerance in tomato	Olszewski, N.E. Weiss, D.	U Minnesota Hebrew U	MN	App. Duration: 3 years
IS-4818-15	Optimization of shoot architecture for the agricultural field	Eshed, Y. Lippman, Z.B.	Weizmann Inst. Cold Spring Harbor	NY	App. Duration: 3 years
IS-4822-15R 4751	Elucidating the genetic pathways involved in shikimate, anthocyanin and hydrolyzable tannin accumulation in pomegranate	Amir, R. Tian, L. Holland, D. Borochoy-Neori, H.	MIGAL R&D UC, Davis ARO, Min. Ag. Southern Arava R&D	CA	App. Duration: 3 years
IS-4827-15	Mechanisms underlying root system architecture adaptation to low phosphate environment	Savaldi-Goldstein, S. Brady, S.M.	Technion UC, Davis	CA	App. Duration: 3 years
US-4828-15	What shapes the crossover landscape in maize and wheat and how can we modify it	Pawlowski, W.P. Levy, A.A.	Cornell U Weizmann Inst.	NY	App. Duration: 3 years
IS-4829-15	Introgression of stripe rust resistance genes from <i>Aegilops speltoides</i> into wheat with a novel introgression methodology	Distelfeld, A. Dvorak, J. Sela, H.	Tel Aviv U UC, Davis Tel Aviv U	CA	App. Duration: 3 years
IS-4911-16	Characterization of genetic variation and yield heterosis in <i>Cucumis melo</i>	Gur, A. Buckler, E.S. Burger, J. Tadmor, Y. Klapp, I.	ARO, Min. Ag. Cornell U ARO, Min. Ag. ARO, Min. Ag. ARO, Min. Ag.	NY	App. Duration: 3 years
IS-4915-16R 4814	Functional analysis of barley cysteine proteases and their role in nitrogen remobilization from senescing leaves	Fluhr, R. Fischer, A.	Weizmann Inst. Montana St. U	MT	App. Duration: 3 years
US-4916-16	Positional cloning of a rye QTL responsible for water stress resistance in wheat based on radiation mapping and comparative genomics	Dubcovsky, J. Fahima, T. Krugman, T. Howell, T.	UC, Davis U Haifa U Haifa UC, Davis	CA	App. Duration: 3 years

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Crop Production**

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US-4918-16CR 4423	Characterization of the <i>Or</i> regulatory network for carotenoid biofortification in food crops - phase II	4743	<p>Li, L. USDA, ARS NY</p> <p>Tadmor, Y. ARO, Min. Ag.</p> <p>Burger, J. ARO, Min. Ag.</p> <p>Portnoy, V. ARO, Min. Ag.</p> <p>Schaffer, A. ARO, Min. Ag.</p> <p>Fei, Z. Boyce Thompson NY</p>	App. Duration: 3 years
IS-4919-16R	Systematic analyses of the roles of <i>Solanum Lycopersicum</i> ABA receptors in environmental stress and development	4760	<p>Mosquna, A. Hebrew U</p> <p>Cutler, S. UC, Riverside CA</p>	App. Duration: 3 years
IS-4921-16F	Novel strategies to induce male sterility and restore fertility in <i>Brassicaceae</i> crops		<p>Ostersetzer-Biran, O. Hebrew U</p> <p>Mower, J. U Nebraska NE</p>	App. Duration: 1 year
IS-4926-16R	Understanding the molecular basis of carotenoid synthesis and accumulation in stone fruits: A platform to enhance fruit value	4811	<p>Isaacson, Tal ARO, Min. Ag.</p> <p>Gasic, K. Clemson U SC</p> <p>Bielenberg, D.G. Clemson U SC</p> <p>Lewinsohn, E. ARO, Min. Ag.</p> <p>Holland, D. ARO, Min. Ag.</p>	App. Duration: 3 years
IS-4929-16FR	Drought adaptation mechanisms in pine hybrids	4824	<p>David-Schwartz, R. ARO, Min. Ag.</p> <p>Neale, D.B. UC, Davis CA</p>	App. Duration: 1 year
US-5009-17	Cucumis fruit surface biology: Genetic analysis of fruit exocarp features in melon (<i>C. melo</i>) and cucumber (<i>C. sativus</i>)		<p>Grumet, R. Michigan St. U MI</p> <p>Schaffer, A. ARO, Min. Ag.</p> <p>Barry, C. Michigan St. U MI</p> <p>Burger, J. ARO, Min. Ag.</p> <p>Gur, A. ARO, Min. Ag.</p> <p>Tadmor, Y. ARO, Min. Ag.</p>	App. Duration: 3 years
IS-5010-17	Improving fleshy fruit set by dissecting the AGL6 regulatory pathway		<p>Arazi, T. ARO, Min. Ag.</p> <p>Grotewold, E. Michigan St. U MI</p>	App. Duration: 3 years
IS-5020-17	The molecular dissection of the crop maturation trait in peanut		<p>Hovav, R. ARO, Min. Ag.</p> <p>Ozias-Akins, P. U Georgia GA</p>	App. Duration: 3 years

**BARD Approved Projects
2015 - 2018
Crop Production**

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IS-5103-18R 4922	Engineering parthenocarpic fruit production in tomato			App. Duration: 3 years
	Ori, N.	Hebrew U		
	Reed, J.W.	U No. Carolina	NC	
IS-5106-18R 5008	Exploring the polyembryonic seed trait in mango as a basis for a biotechnology platform for fruit tree crops			App. Duration: 3 years
	Sherman, A.	ARO, Min. Ag.		
	Kuhn, D.N.	USDA, ARS	FL	
	Cohen, Y.	ARO, Min. Ag.		
	Ophir, R.	ARO, Min. Ag.		
US-5112-18	Regulation of plant transpiration by carbohydrate availability			App. Duration: 3 years
	Holbrook, N.M	Harvard U	MA	
	Sperling, O.	ARO, Min. Ag.		
	Ben-Gal, A.	ARO, Min. Ag.		
IS-5116-18	Increasing the spectrum of genetic variation accessible for wheat breeding by using loss-of-function mutants of anti-recombination genes			App. Duration: 3 years
	Korol, A.B.	U Haifa		
	Akhunov, E.	Kansas St. U	KS	
IS-5120-18C 4818	Fine tuning the shoot and inflorescence architectures for improved tomato yield			App. Duration: 3 years
	Eshed, Y.	Weizmann Inst.		
	Lippman, Z.B.	Cold Spring Harbor	NY	

BARD Approved Projects
2015 - 2018
Environment/Water/Renewable Resources

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IS-4870-15R	Phosphorus capture recycling and utilization for sustainable agriculture using Al/organic composite water treatment residuals	App. Duration: 3 years															
4653	<table border="0"> <tr> <td>Litaor, M.</td> <td>MIGAL R&D</td> <td></td> </tr> <tr> <td>Ippolito, J.</td> <td>Colorado St. U</td> <td>CO</td> </tr> <tr> <td>Zohar, I.</td> <td>MIGAL R&D</td> <td></td> </tr> <tr> <td>Massey, M.S.</td> <td>CA State U East Bay</td> <td>CA</td> </tr> </table>	Litaor, M.	MIGAL R&D		Ippolito, J.	Colorado St. U	CO	Zohar, I.	MIGAL R&D		Massey, M.S.	CA State U East Bay	CA				
Litaor, M.	MIGAL R&D																
Ippolito, J.	Colorado St. U	CO															
Zohar, I.	MIGAL R&D																
Massey, M.S.	CA State U East Bay	CA															
US-4877-15	Investigation of particulate flow behavior in a continuous, high solids, leach-bed biogasification system	App. Duration: 3 years															
	<table border="0"> <tr> <td>Pullammanappallil, P.C.</td> <td>U Florida</td> <td>FL</td> </tr> <tr> <td>Kalman, H.</td> <td>Ben Gurion U</td> <td></td> </tr> <tr> <td>Curtis, J.</td> <td>U Florida</td> <td>FL</td> </tr> </table>	Pullammanappallil, P.C.	U Florida	FL	Kalman, H.	Ben Gurion U		Curtis, J.	U Florida	FL							
Pullammanappallil, P.C.	U Florida	FL															
Kalman, H.	Ben Gurion U																
Curtis, J.	U Florida	FL															
IS-4964-16R	DOM affected behavior of manufactured nanoparticles in soil-plant system	App. Duration: 3 years															
4868	<table border="0"> <tr> <td>Chefetz, B.</td> <td>Hebrew U</td> <td></td> </tr> <tr> <td>Xing, B.</td> <td>U Mass</td> <td>MA</td> </tr> <tr> <td>Eshed-Williams, L.</td> <td>Hebrew U</td> <td></td> </tr> <tr> <td>Polubesova, T.</td> <td>Hebrew U</td> <td></td> </tr> <tr> <td>Unrine, J.M.</td> <td>U Kentucky</td> <td>KY</td> </tr> </table>	Chefetz, B.	Hebrew U		Xing, B.	U Mass	MA	Eshed-Williams, L.	Hebrew U		Polubesova, T.	Hebrew U		Unrine, J.M.	U Kentucky	KY	
Chefetz, B.	Hebrew U																
Xing, B.	U Mass	MA															
Eshed-Williams, L.	Hebrew U																
Polubesova, T.	Hebrew U																
Unrine, J.M.	U Kentucky	KY															
IS-4977-16R	Nanocomposite hydrogel membranes for fouling mitigation in wastewater reclamation for agricultural production	App. Duration: 3 years															
4874	<table border="0"> <tr> <td>Bernstein, R.</td> <td>Ben Gurion U</td> <td></td> </tr> <tr> <td>Elimelech, M.</td> <td>Yale</td> <td>CT</td> </tr> <tr> <td>Chen, K.L.</td> <td>Johns Hopkins U</td> <td>MD</td> </tr> </table>	Bernstein, R.	Ben Gurion U		Elimelech, M.	Yale	CT	Chen, K.L.	Johns Hopkins U	MD							
Bernstein, R.	Ben Gurion U																
Elimelech, M.	Yale	CT															
Chen, K.L.	Johns Hopkins U	MD															
IS-4982-16F	Development of heat-pulse sensors for measuring fluxes of water and solutes under the root zone	App. Duration: 1 year															
	<table border="0"> <tr> <td>Kamai, T.</td> <td>ARO, Min. Ag.</td> <td></td> </tr> <tr> <td>Kluitenberg, G. J.</td> <td>Kansas St. U</td> <td>KS</td> </tr> <tr> <td>Ben-Gal, A.</td> <td>ARO, Min. Ag.</td> <td></td> </tr> </table>	Kamai, T.	ARO, Min. Ag.		Kluitenberg, G. J.	Kansas St. U	KS	Ben-Gal, A.	ARO, Min. Ag.								
Kamai, T.	ARO, Min. Ag.																
Kluitenberg, G. J.	Kansas St. U	KS															
Ben-Gal, A.	ARO, Min. Ag.																
US-5046-17R	Metabolic network approaches for deciphering microbial functions in amendment-based solutions for soil-borne disease suppression	App. Duration: 3 years															
4966	<table border="0"> <tr> <td>Mazzola, M.</td> <td>USDA, ARS</td> <td>WA</td> </tr> <tr> <td>Freilich, S.</td> <td>ARO, Min. Ag.</td> <td></td> </tr> <tr> <td>Faigenboim, A.</td> <td>ARO, Min. Ag.</td> <td></td> </tr> </table>	Mazzola, M.	USDA, ARS	WA	Freilich, S.	ARO, Min. Ag.		Faigenboim, A.	ARO, Min. Ag.								
Mazzola, M.	USDA, ARS	WA															
Freilich, S.	ARO, Min. Ag.																
Faigenboim, A.	ARO, Min. Ag.																
US-5051-17	Energy, nutrient and water recovery from dairy waste	App. Duration: 3 years															
	<table border="0"> <tr> <td>Jassby, D.</td> <td>UCA, Los Angeles</td> <td>CA</td> </tr> <tr> <td>Gross, A.</td> <td>Ben Gurion U</td> <td></td> </tr> <tr> <td>Walker, S.</td> <td>UC, Riverside</td> <td>CA</td> </tr> <tr> <td>Tester, W.</td> <td>Cornell U</td> <td>NY</td> </tr> </table>	Jassby, D.	UCA, Los Angeles	CA	Gross, A.	Ben Gurion U		Walker, S.	UC, Riverside	CA	Tester, W.	Cornell U	NY				
Jassby, D.	UCA, Los Angeles	CA															
Gross, A.	Ben Gurion U																
Walker, S.	UC, Riverside	CA															
Tester, W.	Cornell U	NY															

BARD Approved Projects
2015 - 2018
Environment/Water/Renewable Resources

IS-5124-18	Risk of soil erosion by water estimated with remotely-sensed rainfall data, process-based models and weather generators	App. Duration: 3 years
	Morin, E. Hebrew U	
	Goodrich, D.C. USDA, ARS AZ	
	Assouline, S. ARO, Min. Ag.	
	Nearing, M. USDA, ARS AZ	
	Argaman, E. ARO, Min. Ag.	
	Guertin, D.P. U Arizona AZ	
	Hernandez, M. USDA, ARS AZ	
IS-5125-18R	Increasing water availability through agricultural groundwater recharge	App. Duration: 3 years
5049	Furman, A. Technion	
	Dahlke, H.E. UC, Davis CA	
	Weisbrod, N. Ben Gurion U	
	Raveh, E. ARO, Min. Ag.	
IS-5130-18	Distributed UV LEDs for combined control of fouling of drip emitters and disinfection during irrigation with reclaimed wastewater effluent	App. Duration: 3 years
	Friedler, E. Technion	
	Linden, K.G. Colorado U CO	
US-5135-18C	In planta transformation of wastewater-derived contaminants	App. Duration: 3 years
4771	Pedersen, J.A. U Wisconsin WI	
	Shenker, M. Hebrew U	
	Chefetz, B. Hebrew U	
	Roback, S. UCA, Irvine CA	

BARD Approved Projects
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Food Product-Safety, Security, Quality

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IS-4850-15R	Plant cell cultures for the production of health promoting metabolites	App. Duration: 3 years
4780	<p>Oren-Shamir, M.I. ARO, Min. Ag.</p> <p>Sinclair, D.A. Harvard U MA</p> <p>Fait, A. Ben Gurion U</p> <p>Galili, G. Weizmann Inst.</p> <p>Or, E. ARO, Min. Ag.</p>	
IS-4851-15R	Increasing the value of mushrooms as functional foods: induction of alpha and beta glucan content via novel cultivation methods	App. Duration: 3 years
4777	<p>Schwartz, B. Hebrew U</p> <p>Vetvicka, V. U Louisville KY</p> <p>Danai, O. MIGAL R&D</p> <p>Hadar, Y. Hebrew U</p>	
IS-4858-15	Elucidating the mechanism of pit formation in cherries for improving storage capacity	App. Duration: 3 years
	<p>Friedman, H. ARO, Min. Ag.</p> <p>Mitcham, E.J. UC, Davis CA</p> <p>Sela, N. ARO, Min. Ag.</p>	
IS-4862-15R	Effect of plant systemic resistance and role of type III secretion system in colonization of basil and lettuce by <i>Salmonella enterica</i>	App. Duration: 3 years
4621	<p>Manulis, S. ARO, Min. Ag.</p> <p>Brandl, M.T. USDA, ARS CA</p> <p>Barash, I. Tel Aviv U</p> <p>Chalupowicz, L. ARO, Min. Ag.</p> <p>McClelland, M. UCA, Irvine CA</p> <p>Bostock, R.M. UC, Davis CA</p> <p>Elad, Y. ARO, Min. Ag.</p> <p>Sessa, G. Tel Aviv U</p>	
IS-4864-15F	Postharvest sweetening of potato seed tubers and effects on their yield performance	App. Duration: 1 year
	<p>Eshel, D. ARO, Min. Ag.</p> <p>Jiang, J. U Wisconsin WI</p>	
IS-4957-16R	How berry enlargement practices affect the flavor of grapes	App. Duration: 3 years
4855	<p>Lichter, A. ARO, Min. Ag.</p> <p>Ebeler, S.E. UC, Davis CA</p> <p>Lewinsohn, E. ARO, Min. Ag.</p>	
IS-4960-16FR	The potential use of a highly-stable lactonase from hyperthermophilic archaea for disruption of quorum sensing in soft rot <i>Pectobacteria</i>	App. Duration: 1 year
4843	<p>Helman, Y. Hebrew U</p> <p>Elias, M. U Minnesota MN</p> <p>Aksan, A. U Minnesota MN</p>	

BARD Approved Projects
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Food Product-Safety, Security, Quality

US-4962-16R	Developing advanced chemical and computational methods for assessing organoleptic properties of olive oil	App. Duration: 3 years
4854	<p>Wang, S.C. UC, Davis CA</p> <p>Benjamin, O. Tel Hai College</p> <p>Dag, A. ARO, Min. Ag.</p> <p>Tagkopoulos, I. UC, Davis CA</p>	
IS-5038-17C	Postharvest sweetening of potato seed tubers and effects on their yield performance	App. Duration: 3 years
4864	<p>Eshel, D. ARO, Min. Ag.</p> <p>Jiang, J. Michigan St. U MI</p>	
IS-5040-17	Microbial networks on harvested apples and the design of antagonistic consortia to control postharvest pathogens	App. Duration: 3 years
	<p>Droby, S. ARO, Min. Ag.</p> <p>Wisniewski, M.E. USDA, ARS WV</p> <p>Freilich, S. ARO, Min. Ag.</p> <p>Norelli, J.L. USDA, ARS WV</p> <p>Faigenboim, A. ARO, Min. Ag.</p>	
IS-5042-17C	Mechanisms governing the global regulation of mycotoxin production and pathogenicity by <i>Penicillium expansum</i> in postharvest fruits	App. Duration: 3 years
4773	<p>Sionov, E. ARO, Min. Ag.</p> <p>Keller, N.P. U Wisconsin WI</p> <p>Barad-Kotler, S. ARO, Min. Ag.</p>	
IS-5143-18R	New insights into apple calcium application: Understanding its contradicting effects on postharvest disorders for improved fruit quality	App. Duration: 3 years
5041	<p>Gamrasni, D. MIGAL R&D</p> <p>Kalsits, L. WA State U WA</p> <p>Friedman, H. ARO, Min. Ag.</p>	
IS-5146-18	Green nature inspired nano-sanitizers for enhancing safety of ready-to-eat fruits and vegetables	App. Duration: 3 years
	<p>Poverenov, E. ARO, Min. Ag.</p> <p>Demokritou, P. Harvard U MA</p> <p>Luo, Y. USDA, ARS MD</p> <p>Rodov, V. ARO, Min. Ag.</p>	