

Agricultural Innovation & Engineering Technologies

US-3999-07F	Simultaneous Treatment of Odorants and Pathogens Emitted from Confined Animal Feeding Operations (CAFOs) by Advanced Oxidation Technologies		App. Duration: 1 year
	Koziel, A.J.	Iowa St. U	IA
	Laor, Y.	ARO, Min. Ag.	
	Zimmerman, J.J.	Iowa St. U	IA
	Armon, R.	Technion	
	Hoff, S.J.	Iowa St. U	IA
	Ravid, U.	ARO, Min. Ag.	
IS-4005-07R	Developing Simulation Tool for the Prediction of Cohesive Behavior		App. Duration: 3 years
3863	Agricultural Materials Using Discrete Element Modeling		
	Shmulevich, I.E.	Technion	
	Upadhyaya, S.K.	UC, Davis	CA
	Rubinstein, D.	Technion	
	Asaf, Z.	Technion	
	Mitchell, J.P.	UC, Davis	CA
IS-4122-08R	Enhanced Climate Control of Semi-arid and Arid Greenhouses		App. Duration: 3 years
4001	Equipped with Fogging Systems		
	Linker, R.	Technion	
	Kacira, M.	U Arizona	AZ
	Arbel, A.	ARO, Min. Ag.	
	Giacomelli, G.A.	U Arizona	AZ
	Kubota, C.	U Arizona	AZ
IS-4255-09	Fusion of Hyper-Spectral and Thermal Images for Evaluating Nitrogen and Water Status in Potato Fields for Variable Rate Application		App. Duration: 3 years
	Cohen, Y.	ARO, Min. Ag.	
	Rosen, C.J.	U Minnesota	MN
	Alchanatis, V.	ARO, Min. Ag.	
	Mulla, D.J.	U Minnesota	MN
	Heuer, B.	ARO, Min. Ag.	
	Dar, Z.	Isr. Min. Agr.	
US-4280-10R	Automated imaging broiler chicksexing for gender-specific and efficient production		App. Duration: 3 years
4257			
	Tao, Y.	U Maryland	MD
	Mizrach, A.	ARO, Min. Ag.	
	Alchanatis, V.	ARO, Min. Ag.	
	Shamir, N.	ARO, Min. Ag.	
	Porter, T.E.	U Maryland	MD
IS-4374-11C	Micrometeorological methods for inferring whole canopy evapotranspiration in large agricultural structures: measurements and modeling		App. Duration: 3 years
3861			
	Tanny, J.	ARO, Min. Ag.	
	Katul, G.	Duke U	NC
	Cohen, S.	ARO, Min. Ag.	
	Teitel, M.	ARO, Min. Ag.	

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Agriculture Economics and Rural Development

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US-4096-08

The Use of Branding and Sampling in Agricultural Fresh Produce

App. Duration: 3 years

Zilberman, D.	UC, Berkeley	CA
Heiman, A.	Hebrew U	
Jin, Y.	Rutgers	NJ

Animal Health and Invasive Species

IS-3979-07	Replication Defective Cyprinid Herpes Virus-3 (CyHV-3) as a Combined Prophylactic Vaccine in Carps	App. Duration: 3 years
	Kotler, M. Hebrew U	
	Hanson, L. Missi. St U MS	
	Burgess, S.C. Missi. St U MS	
IS-4100-08C 3679	Characterization and Control Strategies of Low Pathogenic Avian Influenza Virus H9N2	App. Duration: 3 years
	Perk, S. Isr. Vet. Inst.	
	Mundt, E. U Georgia GA	
	Panshin, A. Isr. Vet. Inst.	
	Davidson, I. Isr. Vet. Inst.	
	Shkoda, I. Isr. Vet. Inst.	
	Altory, A. Isr. Vet. Inst.	
	Garcia, M. U Georgia GA	
	Golander, N. Isr. Vet. Inst.	
	Nagar, S. Isr. Vet. Inst.	
IS-4105-08	Exploration of the Epidemiology of a Newly Emerging Cattle-Epizootic Hemorrhagic Disease Virus in Israel	App. Duration: 3 years
	Klement, E. Hebrew U	
	Howerth, E. U Georgia GA	
	Wilson, W.C. USDA, ARS WY	
	Stallknecht, D. U Georgia GA	
	Mead, D. U Georgia GA	
	Yadin, H. Isr. Vet. Inst.	
	Lensky, I. Bar Ilan U	
	Galon, N. Haklait	
IS-4106-08R 3982	Genomic and Organismal Studies to Elucidate the Mechanisms of Infectivity of Entomopathogenic Fungi to Ticks	App. Duration: 3 years
	Glazer, I. ARO, Min. Ag.	
	Churchill, A.C.L. Cornell U NY	
	Gindin, G. ARO, Min. Ag.	
	Samish, M. Isr. Vet. Inst.	
IS-4185-09F	Might Bacterial Symbionts Influence Vectorial Capacity of Biting Midges for Ruminant Viruses?	App. Duration: 1 year
	Gottlieb, Y. Hebrew U	
	Mullens, B. UC, Riverside CA	
US-4187-09C 3315	Control of Bovine Anaplasmosis: Protective Capacity of the MSP2 Allelic Repertoire	App. Duration: 3 years
	Brayton, K. WA State U WA	
	Shkap, V. Isr. Vet. Inst.	
	Palmer, G.H. WA State U WA	
	Brown, W.C. WA State U WA	
	Molad, T. Isr. Vet. Inst.	

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US-4190-09R	Development of Fish Edible Vaccines on the Yeast and	App. Duration: 3 years
8717	Redmicroalgae Platforms	
	Vakharia, V.N. UMBC MD	
	Arad, S. Ben Gurion U	
	Zohar, Y. UMD Marine MD	
	Weinstein, Y. Ben Gurion U	
	Abramovitch-Gottlib, L. Ben Gurion U	
IS-4192-09	Development of a Plasmid-Based Reverse Genetics System for the	App. Duration: 3 years
	Bluetongue and Epizootic Hemorrhagic Disease Viruses to Allow a	
	Comparative Characterization of the Function of the NS3 Viroprotein	
	in Viral Egress	
	Ehrlich, M. Tel Aviv U	
	Parker, J.S.L. Cornell U NY	
	Dermody, T.S. Vanderbilt U. TN	
IS-4281-10R	Identification of genes involved in virulence of <i>Escherichia coli</i>	App. Duration: 3 years
4189	mastitis by signature tagged mutagenesis	
	Shpigel, N.Y. Hebrew U	
	Schukken, Y.H. Cornell U NY	
	Rosenshine, I. Hebrew U	
IS-4287-10	Discovery and reconstitution of cross-reactive vaccine targets for H5	App. Duration: 3 years
	and H9 avian influenza	
	Gershoni, J.M. Tel Aviv U	
	Swayne, D.E. USDA, ARS GA	
	Pupko, T. Tel Aviv U	
	Perk, S. Isr. Vet. Inst.	
	Panshin, A. Isr. Vet. Inst.	
	Lublin, A. Isr. Vet. Inst.	
	Golander, N. Isr. Vet. Inst.	
IS-4290-10	Honeybee modulation of infection with the Israeli acute paralysis	App. Duration: 3 years
	virus, in asymptomatic, acutely infected and CCD colonies	
	Chejanovsky, N. ARO, Min. Ag.	
	Cox-Foster, D.L. Penn State U PA	
	Soroker, V. ARO, Min. Ag.	
	Ophir, R. ARO, Min. Ag.	
US-4378-11	Brucella second messenger coordinates stages of infection	App. Duration: 3 years
	Splitter, G.A. U Wisconsin WI	
	Banai, M. Isr. Vet. Inst.	
	Harms, J.S. U Wisconsin WI	
US-4379-11	Antigenic cartography of H9 avian influenza virus and its	App. Duration: 3 years
	application to vaccine selection	
	Spackman, E. USDA, ARS GA	
	Davidson, I. Isr. Vet. Inst.	

Animal Health and Invasive Species

IS-4380-11C

4185

An investigation of the role of bacterial symbionts in regulating the biology and vector competence of Culicoides vectors of animal viruses

App. Duration: 3 years

Gottlieb, Y.

Hebrew U

Mullens, B.

UC, Riverside

CA

Stouthamer, R.

UC, Riverside

CA

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Animal Production

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IS-4202-09R	Control of Synchronization of Puberty in the Russian Sturgeon	App. Duration: 3 years
3858		
	Sivan-Levavi, B.	Hebrew U
	Doroshov, S.I.	UC, Davis CA
	Chapman, F.A.	U Florida FL
	Degani, G.	MIGAL R&D
	Van Eenennaam, J.	UC, Davis CA
IS-4296-10	Gastrointestinal osmoregulatory activity in <i>Tilapia</i> and its effects on growth, an opportunity for fish diet developments	App. Duration: 3 years
	Cnaani, A.	ARO, Min. Ag.
	Grau, E.G.	U Hawaii HI
	Lerner, D.	U Hawaii HI
	Harpaz, S.	ARO, Min. Ag.
IS-4300-10	The effects of enhanced hypertrophy, reduced oxygen supply and heat load on breast meat yield and quality in broilers	App. Duration: 3 years
	Cahaner, A.	Hebrew U
	Bilgili, S.F.	Auburn U AL
	Halevy, O.	Hebrew U
	Lien, R.J.	Auburn U AL
	Joiner, K.	Auburn U AL
IS-4390-11	Exploring the role of the rumen microbiota in determining the feed efficiency of dairy cows	App. Duration: 3 years
	Mizrahi, I.	ARO, Min. Ag.
	White, B.A.	U Illinois IL
IS-4394-11R	Optimization of methodology for genomic selection of moderate and large dairy cattle populations	App. Duration: 3 years
4293		
	Weller, J.I.	ARO, Min. Ag.
	Misztal, I.	U Georgia GA
	Ron, M.	ARO, Min. Ag.

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Aquaculture

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IS-3995-07C **Molecular Mechanisms of Sex Determination in Cultured Tilapias**

App. Duration: 3 years

3561

Hulata, G.	ARO, Min. Ag.	
Kocher, T.D.	U Maryland	MD
Ron, M.	ARO, Min. Ag.	
Seroussi, E.	ARO, Min. Ag.	

IS-3997-07 **Genetic Basis of Cyprinid Herpes Virus-3 Resistance in Common Carp**

App. Duration: 3 years

David, L.	Hebrew U	
Palti, Y.	USDA, ARS	WV
Kotler, M.	Hebrew U	
Hulata, G.	ARO, Min. Ag.	
Hallerman, E. M.	Virginia Polytech	VA

Crop Health and Invasive Species

US-4041-07C 3624	Modulation of the Redox Climate and Phosphatase Signaling in a Necrotroph: an Axis for Inter- and Intra-cellular Communication that Regulates Development and Pathogenicity Dickman, M.B. TX AgriLife Res TX Yarden, O. Hebrew U	App. Duration: 3 years
IS-4047-07	Molecular Interactions of <i>Clavibacter michiganensis subsp. michiganensis</i> with Tomato Manulis, S. ARO, Min. Ag. Smart, C.D. Cornell U NY Barash, I. Tel Aviv U Sessa, G. Tel Aviv U Hoch, H. C. NY Agr. Exp. St NY	App. Duration: 3 years
US-4048-07R 3925	Characterization and Chemistry of Sexual Communication in Two Psyllid Pests of Pears (Homoptera: Psyllidae) Horton, D.R. USDA, ARS WA Soroker, V. ARO, Min. Ag. Landolt, P.J. USDA, ARS WA Zada, A. ARO, Min. Ag.	App. Duration: 3 years
IS-4062-07	Dissection of Whitefly-geminivirus Interactions at the Transcriptomic, Proteomic and Cellular Levels Ghanim, M. ARO, Min. Ag. Cicero, J. U Arizona AZ Brown, J.K. U Arizona AZ Czosnek, H.H. Hebrew U	App. Duration: 3 years
IS-4066-07	The Unexpected Specificity of a Sea Anemone Small Toxin for Insect Na-channels and its Synergic Effects with Various Insecticidal Ligands: A New Model to Mimic Gordon, D. Tel Aviv U Dong, K.E. Michigan St. U MI Gurevitz, M. Tel Aviv U	App. Duration: 3 years
IS-4067-07	Genomic Approaches for Understanding Virulence and Resistance in the Sunflower-Orobanche Host-Parasite Interaction Joel, D.M. ARO, Min. Ag. Knapp, S.J. U Georgia GA Tadmor, Y. ARO, Min. Ag. Bowers, J. U Georgia GA	App. Duration: 3 years
IS-4155-08	One Host, Two Associated Pests: Responses of Tomato Plants to Whiteflies and Broad Mites Perl-Treves, R. Bar Ilan U Walling, L.L. UC, Riverside CA Soroker, V. ARO, Min. Ag.	App. Duration: 1 year

Crop Health and Invasive Species

US-4158-08	Broad-spectrum Resistance to Root-Knot Nematodes in Transgenic Cucurbits	App. Duration: 3 years
	Davis, E.L. N Carolina St. U NC	
	Oka, Y. ARO, Min. Ag.	
	Gal-On, A. ARO, Min. Ag.	
	Wehner, T.C. N Carolina St. U NC	
	Zelcer, A. ARO, Min. Ag.	
IS-4159-08C 3785	MAP Kinase Cascades Activated by SIMAPKKKϵ and their Involvement in Tomato Resistance to Bacterial Pathogens	App. Duration: 3 years
	Sessa, G. Tel Aviv U	
	Martin, G.B. Boyce Thompson NY	
IS-4163-08C 3634	Molecular Characterization of PBAN G-protein Coupled Receptors in Moth Pest Species: Design of Antagonists	App. Duration: 3 years
	Rafaeli, A. ARO, Min. Ag.	
	Jurenka, R.A. Iowa St. U IA	
US-4165-08C 3623	Post-transcriptional Regulation of Host Genes Involved with Symptom Expression in Potyviral Infections	App. Duration: 3 years
	Whitham, S.A. Iowa St. U IA	
	Gal-On, A. ARO, Min. Ag.	
	Gaba, V.P. ARO, Min. Ag.	
IS-4167-08C 3793	Fungal Iron Acquisition, Oxidative Stress and Virulence in the Cochliobolus-maize Interaction	App. Duration: 3 years
	Horwitz, B.A. Technion	
	Turgeon, B.G. Cornell U NY	
IS-4169-08R 4058	Identifying <i>Arabidopsis thaliana</i> Defense Genes to Phloem-feeding Insects	App. Duration: 3 years
	Morin, S. Hebrew U	
	Walker, G.P. UC, Riverside CA	
	Walling, L.L. UC, Riverside CA	
	Aharoni, A. Weizmann Inst.	
IS-4205-09C 3356	Rational Design of Insect Control Agent Prototypes Based on Pyrokinin/PBAN Neuropeptide Antagonists	App. Duration: 3 years
	Altstein, M. ARO, Min. Ag.	
	Nachman, R.J. USDA, ARS TX	
IS-4210-09	IQD1 Function in Defense Responses	App. Duration: 3 years
	Levy, M. Hebrew U	
	Zielinski, R. U Illinois IL	
	Reddy, A.S. Colorado St. U CO	
IS-4211-09F	Targeting of Strigolactones Associated Pathways for Conferring Orobanche Resistant Traits in Tomato and Medicago	App. Duration: 1 year
	Kapulnik, Y. ARO, Min. Ag.	
	Harrison, M.J. Boyce Thompson NY	
	Koltai, H. ARO, Min. Ag.	
	Hershenhoren, J. ARO, Min. Ag.	

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US-4216-09	Control of Bacterial Fruit Blotch of Cucurbits Using the Maize Non-Host Disease Resistance Gene Rxo1	App. Duration: 3 years
	Zhao, B. Virginia Polytech VA	
	Burdman, S. Hebrew U	
	Walcott, R. U Georgia GA	
	Welbaum, G. Virginia Polytech VA	
US-4304-10R	Rickettsia in the whitefly <i>Bemisia tabaci</i>: Phenotypic variants and fitness effects	App. Duration: 3 years
4209	Hunter, M.S. U Arizona AZ	
	Zchori-Fein, E. ARO, Min. Ag.	
US-4309-10F	Rootstock delivery of PGIPs for pathogen protection in grafted tomatoes	App. Duration: 1 year
	Labavitch, J.M. UC, Davis CA	
	Edelstein, M. ARO, Min. Ag.	
	Powell, A.L.T. UC, Davis CA	
	Fallik, E. ARO, Min. Ag.	
IS-4312-10	The involvement of <i>N</i>-Acylethanolamines in signal transduction of microbial associated molecular pattern (MAMPs) perception	App. Duration: 3 years
	Avni, A. Tel Aviv U	
	Chapman, K.D. U No. Texas TX	
IS-4313-10C	The face of interaction of anti-insect selective toxins with receptor site-3 on voltage-gated sodium channels as a platform for design of novel selective insecticides	App. Duration: 3 years
3928	Gurevitz, M. Tel Aviv U	
	Catterall, W.A. U Washington WA	
	Gordon, D. Tel Aviv U	
IS-4314-10C	Role of the viral AlkB homologs in RNA repair	App. Duration: 3 years
3784	Mawassi, M. ARO, Min. Ag.	
	Dolja, V.V. Oregon St. U OR	
US-4318-10R	Biological control of cereal aphids in wheat: Implications of alternative foods and intraguild predation	App. Duration: 3 years
4220	Lundgren, J.G. USDA, ARS SD	
	Coll, M. Hebrew U	
	Seagraves, M. USDA, ARS SD	
	Harwood, J.D. U Kentucky KY	
IS-4403-11C	<i>Clavibacter michiganensis subsp. michiganensis</i>-tomato interactions: expression and function of virulence factors, plant defense responses and pathogen movement	App. Duration: 3 years
4047	Manulis, S. ARO, Min. Ag.	
	Smart, C.D. Cornell U NY	
	Barash, I. Tel Aviv U	
	Chalupowicz, L. Tel Aviv U	
	Sessa, G. Tel Aviv U	
	Burr, T.J. Cornell U NY	

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US-4010-07C 3575	Sugar and Acid Homeostasis in Citrus Fruit	Blumwald, E. Sadka, A.	UC, Davis ARO, Min. Ag.	CA	App. Duration: 3 years
IS-4012-07	Regulation of Tomato Fruit Development by Interacting MYB Proteins	Barg, R. Grotewold, E. Salts, Y.	ARO, Min. Ag. Ohio St. U ARO, Min. Ag.	OH	App. Duration: 3 years
US-4015-07	Molecular and Anatomical Characterization of Sweetpotato Storage Root Formation	LaBonte, D.R. Pressman, E. Firon, N. Villordon, A.	Louisiana St. U ARO, Min. Ag. ARO, Min. Ag. Louisiana St. U	LA LA	App. Duration: 3 years
IS-4017-07	Role of Polyploidy in Vine Cacti Speciation and Crop Domestication	Tel-Zur, N. Doyle, J.	Ben Gurion U Cornell U	NY	App. Duration: 3 years
IS-4018-07R 3881	Characterization and Manipulation of the Primary Components in Gibberellin Signaling in the Grape Berry	Or, E. Sun, T.P. Lichter, A. Perl, A.	ARO, Min. Ag. Duke U ARO, Min. Ag. ARO, Min. Ag.	NC	App. Duration: 3 years
US-4024-07	Map-based Cloning of High-temperature Adult Plant Stripe Rust Resistance Gene Yr36 from Wheat	Dubcovsky, J. Fahima, T. Blechl, A.E. San Miguel, P.	UC, Davis U Haifa USDA, ARS Purdue	CA CA IN	App. Duration: 3 years
IS-4125-08C 3332	The Molecular and Biochemical Basis of Terpenoid Aroma Formation in Tomato	Lewinsohn, E. Dudareva, N. Sitrit, Y. Pichersky, E.	ARO, Min. Ag. Purdue Ben Gurion U U Michigan	IN MI	App. Duration: 3 years
US-4128-08	Genetic Linkage Mapping of Basil (<i>Ocimum basilicum</i>)	Belanger, F.C. Dudai, N. Katzir, N. Simon, J.E.	Rutgers ARO, Min. Ag. ARO, Min. Ag. Rutgers	NJ NJ	App. Duration: 1 year

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IS-4134-08R	Identification and Allelic Variation of Genes Involved in the Potato Glycoalkaloid Biosynthetic Pathway	App. Duration: 3 years
4019	Ginzberg, I. ARO, Min. Ag. Veilleux, R.E. Virginia Polytech VA Tokuhisa, J. Virginia Polytech VA	
IS-4137-08	Population Genomics and Association Mapping of Disease Resistance Genes in Israeli Populations of Wild Relatives of Wheat, <i>Triticum dicoccoides</i> and <i>Aegilops speltoides</i>	App. Duration: 3 years
	Breiman, A. Tel Aviv U Dvorak, J. UC, Davis CA Korol, A.B. U Haifa Akhunov, E. Kansas St. U KS	
IS-4222-09CF	Chemical Genetics of the COP9 Signalosome: Identification of Novel Regulators of Plant Development	App. Duration: 1 year
3123	Chamovitz, A.D. Tel Aviv U Yang, Z. UC, Riverside CA	
IS-4223-09C	System Approach to Understanding the Metabolic Diversity in Melon	App. Duration: 3 years
3877	Katzir, N. ARO, Min. Ag. Giovannoni, J. Boyce Thompson NY Aharoni, A. Weizmann Inst. Fei, Z. Boyce Thompson NY Lewinsohn, E. ARO, Min. Ag. Schaffer, A.A. ARO, Min. Ag. Tadmor, Y. ARO, Min. Ag.	
US-4228-09	The Role of FtsH11 Protease in Chloroplast Biogenesis and Maintenance at Elevated Temperatures in Model and Crop Plants	App. Duration: 3 years
	Chen, J. USDA, ARS TX Adam, Z. Hebrew U Admon, A. Technion	
IS-4229-09	Structure, Function and Utilization of Plant Photosynthetic Reaction Centers	App. Duration: 3 years
	Nelson, N. Tel Aviv U Yocum, C.F. U Michigan MI	
IS-4234-09	Understanding Cuticle Development in Tomato through the Study of Novel Germplasm with Malformed Cuticles	App. Duration: 3 years
	Schaffer, A.A. ARO, Min. Ag. Rose, J.K. Cornell U NY	
IS-4237-09C	Inactivation of SGS3 as Molecular Basis for RNA Silencing Suppression by TYLCV V2	App. Duration: 3 years
3917	Gafni, Y. ARO, Min. Ag. Citovsky, V. NYSU, Stony Brook NY	

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IS-4243-09R	Calcium-regulated Transcription Factors Mediating Carbon Metabolism in Response to Drought	App. Duration: 3 years
4146	Fromm, H. Tel Aviv U Hasegawa, P.M. Purdue IN Fait, A. Ben Gurion U	
IS-4245-09	Type IV Secretion System of <i>Agrobacterium tumefaciens</i>: Components and Structures	App. Duration: 3 years
	Elbaum, M. Weizmann Inst. Christie, P.J. U Texas, Houston TX	
IS-4246-09	Precise Mapping of Growth Hormone Effects by Cell-Specific Gene Activation Response	App. Duration: 3 years
	Savaldi-Goldstein, S. Technion Mockler, T. Oregon St. U OR	
IS-4248-09R	The Role of Cysteine Partitioning into Glutathione and Methionine Synthesis During Normal and Stress Conditions	App. Duration: 3 years
4068	Amir, R. MIGAL R&D Oliver, D.J. Iowa St. U IA Galili, G. Weizmann Inst. Shanks, J.V. Iowa St. U IA	
IS-4249-09	Exploring General and Specific Regulators of Phase Transitions for Crop Improvement	App. Duration: 3 years
	Eshed, Y. Weizmann Inst. Hake, S. USDA, ARS CA	
IS-4321-10	A three crops test for the ODO breeding method	App. Duration: 3 years
	Tadmor, Y. ARO, Min. Ag. Lippman, Z.B. Cold Spring Harbor NY Jackson, D. Cold Spring Harbor NY Zamir, D. Hebrew U	
US-4322-10	Scent biosynthesis in petunia flowers under normal and adverse environmental conditions	App. Duration: 3 years
	Pichersky, E. U Michigan MI Vainstein, A. Hebrew U Dudareva, N. Purdue IN	
US-4323-10C	Molecular characterization and deployment of the high-temperature adult plant stripe rust resistance gene Yr36 from wheat	App. Duration: 3 years
4024	Dubcovsky, J. UC, Davis CA Fahima, T. U Haifa Blechl, A.E. USDA, ARS CA	
IS-4325-10	Towards improved grape nutrition and defense: The regulation of stilbene metabolism under drought	App. Duration: 3 years
	Fait, A. Ben Gurion U Cramer, G.R. U Nevada NV Perl, A. ARO, Min. Ag.	

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US-4334-10	Protection of the photosynthetic apparatus during desiccation in resurrection plants Kirchhoff, H. Reich, Z.	WA State U Weizmann Inst.	WA	App. Duration: 3 years
IS-4336-10R 4242	Genetic and cellular networks regulating cell fate at the shoot apical meristem Eshed-Williams, L. Zilberman, D.	Hebrew U UC, Berkeley	CA	App. Duration: 3 years
IS-4341-10	Whole genome approach for genetic analysis in cucumber: Fruit size as a test case Sherman, A. Grumet, R. Ophir, R. Katzir, N. Weng, Y.	ARO, Min. Ag. Michigan St. U ARO, Min. Ag. ARO, Min. Ag. USDA, ARS	MI WI	App. Duration: 3 years
US-4423-11	Characterization of the <i>Or</i> regulatory network in melon for carotenoid biofortification in food crops Li, L. Burger, Y. Katzir, N. Tadmor, Y. Schaffer, A.A. Fei, Z.	USDA, ARS ARO, Min. Ag. ARO, Min. Ag. ARO, Min. Ag. ARO, Min. Ag. Boyce Thompson	NY NY	App. Duration: 3 years
IS-4427-11C 3870	Winter chickpea; towards a new winter pulse for the semiarid Pacific Northwest and wider adaptation in the Mediterranean basin Abbo, S. Zhang, H. Coyne, C. Sherman, A. Shtienberg, D. Vandemark, G.J.	Hebrew U Texas A&M USDA, ARS ARO, Min. Ag. ARO, Min. Ag. USDA, ARS	TX WA	App. Duration: 3 years
IS-4428-11F	Wild wheat: a genetic resource for wheat breeding Distelfeld, A. Dvorak, J. Steffenson, B.J.	Tel Aviv U UC, Davis U Minnesota	CA MN	App. Duration: 1 year
IS-4429-11C 3896	Gibberellin signaling in tomato: a possible DELLA-independent response pathway Weiss, D. Olszewski, N.E.	Hebrew U U Minnesota	MN	App. Duration: 3 years
US-4443-11	New factors and approaches for in vitro reconstitution of higher plant Rubisco Stern, D.B. Schuster, G. Azem, A.	Boyce Thompson Technion Tel Aviv U	NY	App. Duration: 3 years

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IS-4447-11F

Efficient allele mining in a model sequenced crop via the compressed sequencing approach

App. Duration: 1 year

Shental, N.

Open U

Xin, Z.

USDA, ARS

TX

Erlich, Y.

Whitehead Inst.

MA

Fridman, E.

Hebrew U

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Environment/Water/Renewable Resources

IS-3962-07	Unstable Flow in Repellent and Sub-critically Repellent Soils: Theory and Management Implications	App. Duration: 3 years
	Wallach, R. Hebrew U	
	Steenhuis, T. Cornell U NY	
	Graber, E.R. ARO, Min. Ag.	
	DiCarlo, D. U Texas at Austin TX	
	Parlange, J.Y. Cornell U NY	
IS-3963-07	The Fate of Phosphorus Originated from Treated Wastewater and Biosolids in Soils: Speciation, Transport, and Accumulation	App. Duration: 3 years
	Shenker, M. Hebrew U	
	Bloom, P.R. U Minnesota MN	
	Shaviv, A.G. Technion	
	Paytan, A. UCA, Santa Cruz CA	
	Cade-Menun, B. Stanford U CA	
	Chen, Y. Hebrew U	
	Tarchitzky, J. Isr. Min. Agr.	
IS-4002-07C 3712	Development of Agricultural Sensors Based on Conductive Polymers	App. Duration: 3 years
	Bendikov, M. Weizmann Inst.	
	Harmon, T.C. UCA, Merced CA	
IS-4080-08FR 3954	Physiological and Biochemical Characterization of the Effects of Oxidant Air Pollutants, Ozone and Gas-phase Nitric Acid, on Plants and Lichens for their Use as Early Warning Biomonitoring of these Air Pollutants	App. Duration: 1 year
	Hochman, A. Tel Aviv U	
	Nash III, H. Arizona St. U AZ	
	Padgett, Pamela USDA-FS CA	
IS-4090-08R 3957	Development of Predictive Tools for Contaminant Transport through Variably-Saturated Heterogeneous Composite Porous Formations	App. Duration: 3 years
	Russo, D. ARO, Min. Ag.	
	Tartakovsky, D.M. UC, San Diego CA	
	Neuman, S.P. U Arizona AZ	
US-4262-09	Separating Components of Evapotranspiration to Improve Efficiency in Vineyard Water Management	App. Duration: 3 years
	Heitman, J.L. N Carolina St. U NC	
	Ben-Gal, A. ARO, Min. Ag.	
	Sauer, T. USDA, ARS MD	
	Agam, N. ARO, Min. Ag.	
	Havlin, J. N Carolina St. U NC	
US-4264-09	Shaping Plant Beneficial Rhizosphere Communities	App. Duration: 3 years
	Crowley, D.E. UC, Riverside CA	
	Minz, D. ARO, Min. Ag.	
	Hadar, Y. Hebrew U	

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US-4266-09R	The Effect of Combined Solarization and in Solum Compost Decomposition on Soil Health	App. Duration: 3 years																		
4085	<table border="0"> <tbody> <tr> <td>VanderGheynst, J.S.</td> <td>UC, Davis</td> <td>CA</td> </tr> <tr> <td>Raviv, M.</td> <td>ARO, Min. Ag.</td> <td></td> </tr> <tr> <td>Stapleton, J.J.</td> <td>UCA, Kearney Ag Center</td> <td>CA</td> </tr> <tr> <td>Minz, D.</td> <td>ARO, Min. Ag.</td> <td></td> </tr> <tr> <td>Cytryn, E.</td> <td>ARO, Min. Ag.</td> <td></td> </tr> <tr> <td>Dahlquist, R.</td> <td>Fresno Pacific</td> <td>CA</td> </tr> </tbody> </table>	VanderGheynst, J.S.	UC, Davis	CA	Raviv, M.	ARO, Min. Ag.		Stapleton, J.J.	UCA, Kearney Ag Center	CA	Minz, D.	ARO, Min. Ag.		Cytryn, E.	ARO, Min. Ag.		Dahlquist, R.	Fresno Pacific	CA	
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Cytryn, E.	ARO, Min. Ag.																			
Dahlquist, R.	Fresno Pacific	CA																		
IS-4353-10	Interactions of engineered nanoparticles with dissolved organic matter (DOM) and organic contaminants in water	App. Duration: 3 years																		
	<table border="0"> <tbody> <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>Chen, Y.</td> <td>Hebrew U</td> <td></td> </tr> </tbody> </table>	Chefetz, B.	Hebrew U		Xing, B.	U Mass	MA	Chen, Y.	Hebrew U											
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Chen, Y.	Hebrew U																			
IS-4356-10	Role of microbiological and geochemical heterogeneity in the fate and transport of nitrogen through the vadose zone	App. Duration: 3 years																		
	<table border="0"> <tbody> <tr> <td>Furman, A.</td> <td>Technion</td> <td></td> </tr> <tr> <td>Harter, T.</td> <td>UC, Davis</td> <td>CA</td> </tr> <tr> <td>Weisbrod, N.</td> <td>Ben Gurion U</td> <td></td> </tr> <tr> <td>Parikh, S.J.</td> <td>UC, Davis</td> <td>CA</td> </tr> <tr> <td>Scow, K.M.</td> <td>UC, Davis</td> <td>CA</td> </tr> <tr> <td>Shaviv, A.G.</td> <td>Technion</td> <td></td> </tr> </tbody> </table>	Furman, A.	Technion		Harter, T.	UC, Davis	CA	Weisbrod, N.	Ben Gurion U		Parikh, S.J.	UC, Davis	CA	Scow, K.M.	UC, Davis	CA	Shaviv, A.G.	Technion		
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Shaviv, A.G.	Technion																			
IS-4360-10	A novel physical-chemical-biological treatment process for swine wastes	App. Duration: 3 years																		
	<table border="0"> <tbody> <tr> <td>Lahav, O.</td> <td>Technion</td> <td></td> </tr> <tr> <td>Ergas, S.J.</td> <td>U So Florida</td> <td>FL</td> </tr> <tr> <td>Green, M.</td> <td>Technion</td> <td></td> </tr> <tr> <td>Cunningham, J.</td> <td>U So Florida</td> <td>FL</td> </tr> </tbody> </table>	Lahav, O.	Technion		Ergas, S.J.	U So Florida	FL	Green, M.	Technion		Cunningham, J.	U So Florida	FL							
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US-4453-11	Development of near zero-discharge land-based recirculated mariculture systems: recycling solid waste for bioenergy	App. Duration: 3 years																		
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Zilberg, D.	Ben Gurion U																			
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US-4455-11	Desalination of brackish water for agricultural application via novel bio-electrochemical approaches	App. Duration: 3 years																		
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US-4465-11

Novel streaming potential and thermal sensor techniques for monitoring water and nutrient fluxes in the vadose zone

App. Duration: 3 years

Jones, S.B.

Utah St U

UT

Friedman, S.P.

ARO, Min. Ag.

Communar, G.

ARO, Min. Ag.

BARD Approved Projects
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Food Product-Safety, Security, Quality

US-4027-07	A Biological Systems Approach to Developing Mealiness-free Peach and Nectarine Fruit	App. Duration: 3 years
	Crisosto, C. UC, Davis CA	
	Lurie, S. ARO, Min. Ag.	
	Friedman, H. ARO, Min. Ag.	
	Ogundiwin, E. UC, Davis CA	
	Peace, C. UC, Davis CA	
	Manganaris, G. UC, Davis CA	
IS-4072-07R	Do Saponins Present in Model Systems and Legume Bread Modulate Cholesterol Absorption <i>in vitro</i> and <i>in vivo</i>?	App. Duration: 3 years
3950	Kerem, Z. Hebrew U	
	Vodovotz, Y. Ohio St. U OH	
	Bonfil, D.J. ARO, Min. Ag.	
	Schwartz, S.J. Ohio St. U OH	
	Failla, M. Ohio St. U OH	
IS-4073-07C	Molecular Studies of Postharvest Leaf and Flower Senescence	App. Duration: 3 years
3815	Meir, S. ARO, Min. Ag.	
	Reid, M.S. UC, Davis CA	
	Jiang, C. UC, Davis CA	
	Lers, A. ARO, Min. Ag.	
	Philosoph-Hadas, S. ARO, Min. Ag.	
IS-4179-08R	Study of the Physiological, Molecular and Genetic Factors Associated with Postharvest Water Loss in Pepper Fruit	App. Duration: 3 years
4071	Fallik, E. ARO, Min. Ag.	
	Joly, R.J. Purdue IN	
	Paran, I. ARO, Min. Ag.	
	Jenks, M.A. Purdue IN	
IS-4180-08	Analysis of Small RNAs Associated with Plant Senescence	App. Duration: 3 years
	Lers, A. ARO, Min. Ag.	
	Green, P.J. U Delaware DE	
IS-4181-08	Application of Pre-storage Short Anaerobiosis to Alleviate Superficial Scald and Bitter Pit in Granny Smith Apples	App. Duration: 3 years
	Pesis, E. ARO, Min. Ag.	
	Mitcham, E.J. UC, Davis CA	
	Ebeler, S.E. UC, Davis CA	
	Lers, A. ARO, Min. Ag.	
IS-4267-09	Desiccation Tolerance in Salmonella and its Implications	App. Duration: 3 years
	Sela, S. ARO, Min. Ag.	
	McClelland, M. UCA, Irvine CA	

Food Product-Safety, Security, Quality

IS-4268-09	The Role of Reactive Oxygen Species (ROS) in Tritrophic Interactions in Postharvest Biocontrol Systems	App. Duration: 3 years
	Droby, S. ARO, Min. Ag.	
	Wisniewski, M.E. USDA, ARS WV	
	Porat, R. ARO, Min. Ag.	
	Macarisin, D. USDA, ARS WV	
US-4273-09	Ultra-Fast Methods and Instrumentation for the Analysis of Hazardous Chemicals in the Food Supply	App. Duration: 3 years
	Lehotay, S.J. USDA, ARS PA	
	Amirav, A. Tel Aviv U	
IS-4368-10	Identification of key aroma compounds and optimization of postharvest handling procedures in order to improve sensory quality of mandarins	App. Duration: 3 years
	Porat, R. ARO, Min. Ag.	
	Plotto, A. USDA, ARS FL	
	Baldwin, E.A. USDA, ARS FL	
	McCollum, T.G. USDA, ARS FL	
	Arpaia, M.L. UC, Riverside CA	
	Obenland, D. USDA, ARS CA	
	Lewinsohn, E. ARO, Min. Ag.	
IS-4371-10C 3803	Elucidating the ripening signaling pathway in banana for improved fruit quality, shelf-life and food security	App. Duration: 3 years
	Friedman, H. ARO, Min. Ag.	
	Vrebalov, J. Boyce Thompson NY	
	Giovannoni, J. Boyce Thompson NY	
IS-4469-11R 4367	Mechanisms activated by fungal-based host pH modulators during quiescent infections and active postharvest disease development	App. Duration: 3 years
	Prusky, D. ARO, Min. Ag.	
	Mengiste, T.D. Purdue IN	
	Fluhr, R. Weizmann Inst.	
US-4471-11F	Antimicrobial and antioxidant functionalized nanoparticles for enhancing food safety and quality: proof of concept	App. Duration: 1 year
	Choudhary, R. So Illin U IL	
	Rodov, V. ARO, Min. Ag.	
	Kohli, P. So Illin U IL	
	Haddock, J. So Illin U IL	
	Droby, S. ARO, Min. Ag.	
IS-4473-11	The therapeutic potential of a desert plant and its active compounds for Alzheimer`s Disease	App. Duration: 3 years
	Elmann, A. ARO, Min. Ag.	
	Lazarov, O. U Illinois IL	
	Kashman, J. Tel Aviv U	
	Ofir, R. Tamar Regional Council	

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IS-4476-11

The role of potassium in quality of grapes after harvest

App. Duration: 3 years

Lichter, A.	ARO, Min. Ag.	
Smilanick, J.L.	USDA, ARS	CA
Obenland, D.	USDA, ARS	CA
Bernstein, N.	ARO, Min. Ag.	
Hashim, J.	UC, Davis	CA

