

BARD Approved Projects
Award Year 2024

21/05/2024

US-5634-24C 5231	The economics of circular bioeconomy: The case of aquaculture and mariculture, polyculture, and resilience	Ag. Economics & Rural Devel.
		Total 310,000 3 years
	Zilberman, D. UC, Berkeley	CA
	Palatnik, R. Yezreel Valley College	
	Hochman, G. U Rutgers	NJ
	Golberg, A. U Tel Aviv	
IS-5636-24	Combining radiative transfer models and artificial intelligence for early detection of broomrape infestations in processing tomatoes	Agricultural Innovation & Engi
		Total 310,000 3 years
	Eizenberg, H. ARO, Min. Ag.	
	Pourreza, A. UC, Davis	CA
	Lati, R.N. ARO, Min. Ag.	
	Mesgaran, M.B. UC, Davis	CA
US-5638-24	Role of colostrum fat in the initiation of PPAR signaling in muscle of neonatal dairy goats and the relationship to long term production	Animal Production
		Total 309,000 3 years
	Casey, T. U Purdue	IN
	Argov-Argaman, N. U Hebrew	
	Mabjeesh, S.J U Hebrew	
	Ferreira, C. U Purdue	IN
IS-5640-24	Improving immune function in heat stressed dairy cows by modulating the activation of cannabinoid receptor 2	Animal Production
		Total 309,000 3 years
	Zachut, M. ARO, Min. Ag.	
	Bradford, B.J. Kansas State U	KS
IS-5644-24R 5.566	The effect of Juvenile hormone on virus activity in bees	Animal Health
		Total 310,000 3 years
	Shpigler, H.Y. ARO, Min. Ag.	
	Dolezal, A. G. U Illinois	IL
IS-5647-24	Establishment of physico-chemical water treatment approach as the main life support system for growing warm- and cold-water fish in recirculated aquaculture systems (RAS)	Aquaculture
		Total 600,000 3 years
	Lahav, O. Technion	
	Zohar, Y. UMBC	MD
IS-5652-24R 5.578	Collaborative aquabotic systems for precision aquaculture operations	Aquaculture
		Total 600,000 3 years
	Edan, Y. U Ben Gurion	
	Hall, S.G. U NC State	NC
	Zarrouk, D. U Ben Gurion	
	Sagi, A. U Ben Gurion	
	Aflalo, D. U Ben Gurion	
	Price, R. LSU, Ag Center	LA
	Smith, D. LSU, Ag Center	LA
	Xiang, L. U NC State	NC

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IS-5653-24	From agricultural waste to resource: expanding the reuse of plant waste through BSFL for fish and crop production		Aquaculture
			Total 305,000 3 years
	Zilberg, D.	U Ben Gurion	
	Romano, N.P.	Virginia State Uni.	VA
	Penno-Winters, S.	Arava-Tamar R&D	
	Khozin-Goldberg, I.	U Ben Gurion	
	Gu, S.	Virginia State Uni.	VA
	Kissinger, M.	U Ben Gurion	
IS-5655-24R 5.582	Domestication of Nile tilapia by manipulation of minor spliceosome activity		Aquaculture
			Total 600,000 3 years
	Biran, J.	ARO, Min. Ag.	
	Kanadia, R.N.	U Connecticut	CT
IS-5656-24	Dissecting the AGL6 parthenocarpy pathway for enhancing fruit set in Solanaceae crops amid the challenges of climate change		Crop Production
			Total 310,000 3 years
	Arazi, T.	ARO, Min. Ag.	
	Zhao, D.D.	U Wisconsin-Milwaukee	WI
IS-5658-24C 5393	Dissecting cytonuclear variation for accelerated grain stability breeding in barley		Crop Production
			Total 308,000 3 years
	Fridman, E.	ARO, Min. Ag.	
	Koenig, D.	UC, Riverside	CA
	Diepenbrock, C.	UC, Davis	CA
IS-5662-24	Improving tomato salt tolerance by elucidating the cellular and genetic basis of Na⁺ transport and accumulation		Crop Production
			Total 310,000 3 years
	Shaar-Moshe, L.	U Haifa	
	Brady, S.M.	UC, Davis	CA
IS-5663-24R 5.603	Cloning of the wheat leaf rust resistance gene LrAK and its functional characterisation		Crop Production
			Total 310,000 3 years
	Sela, H.	U Haifa	
	Olivera Firpo, P.	U Minnesota	MN
	Distelfeld, A.	U Haifa	
IS-5666-24 Pioneer	Creation and validation of a digital twin model for improving almond production		Crop Production
			Total 600,000 3 years
	Paz-Kagan, T.	U Ben Gurion	
	Wang, L.	U Oklahoma St.	OK
	Brown, P.H.	UC, Davis	CA
	Sperling, O.	ARO, Min. Ag.	
	Baram, S.	ARO, Min. Ag.	
IS-5668-24	Predicting the breeding potential of landraces adapted to elevated temperatures		Crop Production
			Total 310,000 3 years
	Hubner, S.	MIGAL R&D	
	Walia, H.	U Nebraska	NE

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IS-5672-24	Optimizing rodent pest control: Unraveling vole feeding preferences for effective crop protection	Crop Health
		Total 310,000 3 years
	Charter, M. U Haifa	
	Shiels, A. USDA-APHIS	DC
IS-5678-24R 5.593	Optimizing strategies for the containment of invasive insect pests	Crop Health
		Total 283,000 3 years
	Lampert, A. U Hebrew	
	Liebhold, A.M. USDA-FS	CA
IS-5679-24	The PELOTA protein of tomato: a determinant of TYLCV resistance and plant fertility	Crop Health
		Total 310,000 3 years
	Burko, Y. U Hebrew	
	Citovsky, V. NYSU, Stony Brook	NY
	Lapidot, M. ARO, Min. Ag.	
US-5680-24 Pioneer	Identifying effective treatments of Xylella fastidiosa-infected grapevines using a platform that mimics the conditions in the plant	Crop Health
		Total 600,000 3 years
	Momeni, B. Boston College	MA
	Soen, Y. Weizmann Inst.	
	De La Fuente, L. U Auburn	AL
IS-5681-24	Identification of DNA variations associated with herbicide resistance in rice CYTOCHROME-P450 genes	Crop Health
		Total 310,000 3 years
	Mosquna, A. U Hebrew	
	Cutler, S. UC, Riverside	CA
US-5682-24	Understanding terpene synthase catalytic specificity toward improving pathogen defense mechanisms in maize	Crop Health
		Total 310,000 3 years
	Zerbe, P. UC, Davis	CA
	Major, D.T. U Bar Ilan	
IS-5684-24C 5038	ABA as a regulator of sucrose metabolism during endodormancy of potato tuber	Food Product
		Total 310,000 3 years
	Eshel, D. ARO, Min. Ag.	
	Jiang, J. U Michigan St.	MI
IS-5689-24	Developing biofilm-inspired synbiotic formulations for aging population based on a desert plant derived infusion	Food Product
		Total 100,000 1 year
	Shemesh, M. ARO, Min. Ag.	
	Nitin, N. UC, Davis	CA
	Elmann, A. ARO, Min. Ag.	

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IS-5694-24	Tillage-induced soil structure and water saturation impact on porewater oxygen and redox conditions: Controls for nutrient availability and water quality	Environ/Water/Ren. Res.
		Total 300,000 3 years
	Borgman, O. MIGAL R&D	
	Morales, V. UC, Davis	CA
US-5696-24R <small>5.622</small>	Understanding the drivers of hydraulic redistribution under salt stress	Environ/Water/Ren. Res.
		Total 309,000 3 years
	Hartzell, S.R. Portland St. U	OR
	Schwartz, N. U Hebrew	
	Huang, C.W. Portland St. U	OR
IS-5698-24	Mapping wetting, salinity and root uptake patterns below intercropping plantations with noninvasive tools and physics-constrained machine-learning techniques	Environ/Water/Ren. Res.
		Total 310,000 3 years
	Moreno, Z. ARO, Min. Ag.	
	Osterman, G. USDA, ARS	MD
	Friedman, S.P. ARO, Min. Ag.	
	Cohen, S. ARO, Min. Ag.	
	Azoulay-Shemer, T. ARO, Min. Ag.	
	McElrone, A.J. USDA, ARS	CA
US-5700-24	Integrated agricultural biomass fast pyrolysis with advanced oxidative pyrolysis wastewater treatment	Environ/Water/Ren. Res.
		Total 310,000 3 years
	Ellison, C. USDA, ARS	MD
	Boxman, R. U Tel Aviv	
	Mullen, C.A. USDA, ARS	PA
	Gerchman, Y. U Haifa	
	Mamane, H. U Tel Aviv	
	Parkansky, M. U Tel Aviv	
IS-5705-24C <small>5046</small>	Reducing unpredictability in soil amendments: an integrative platform for the engineering of root-associated microbiomes	Environ/Water/Ren. Res.
		Total 310,000 3 years
	Freilich, S. ARO, Min. Ag.	
	Somera, T. USDA, ARS	MD
	Korenblum, E. ARO, Min. Ag.	