BARD Approved Projects Years 2026 - 2026

IS-5800-26P C 5563	**From Space to Spray: Satellite-Derived Prescription Maps for Precision Weed Management** *L. Blank: ARO, Min. Ag. , M.B. Mesgaran: UC, Davis , H. Eizenberg: ARO, Min. Ag. , R.N. Lati: ARO, Min. Ag. , F. Kordbacheh: UC, Davis*	Approved: $500,000 *Agricultural Innovation & Engineering Technologies*
US-5804-26PD	**Development of spectrally selective agrivoltaics for water-food-energy nexus** *G. Mohan: U Houston , H. Vitoshkin: ARO, Min. Ag. , G. Mittelman: Afeka College , T. Busani: U New Mexico , E. Raveh: ARO, Min. Ag.*	Approved: $570,000 *Agricultural Innovation & Engineering Technologies*
US-5810-26P	**Novel protein antigens as a path to improve surveillance and diagnostic of bovine leptospirosis** *E. Wunder: U Connecticut , S. Blum: Isr. Vet. Inst. ,* ***N. Stone: U No. Arizona*** *, C. Hamond: U Connecticut*	Approved: $570,000 *Animal Health and Invasive Species*
IS-5812-26P	**Application of advanced molecular techniques to provide real solutions to counter nutrient stress in honey bee** ***Y. Arien: ARO, Min. Ag.*** *, D. Schroeder: U Minnesota*	Approved: $180,000 *Animal Health and Invasive Species*
US-5816-26PD	**Integration of novel sperm functional tests and strategies to enhance cattle reproductive efficiency and productivity** *G Gervasi: U Connecticut , N. Brukman: ARO, Min. Ag.*	Approved: $570,000 *Animal Production*
US-5818-26P R 5727	**Leveraging DNA methylation biomarkers for cattle management and improvement** *G. Liu: USDA, ARS , M. Gershoni: ARO, Min. Ag. , R.L. Baldwin: USDA, ARS , L. Ma: U Maryland , E. Seroussi: ARO, Min. Ag.*	Approved: $570,000 *Animal Production*
IS-5825-26FD	**Characterization of in utero heat stress effects on mesenchymal stem cells** *S. Schlesinger: U Hebrew , G.E. Dahl: U Florida*	Approved: $180,000 *Animal Production*
IS-5827-26	**Biotechnological Approaches to Poultry Systems: Harnessing Spectrum-Specific In-Ovo Photostimulation for Epigenetic Programing to Enhance Growth and Reproduction Efficiency** *A. Marco: U Hebrew , K.C. Diehl: USDA, ARS*	Approved: $345,000 *Animal Production*
IS-5830-26PA	**Multivalent DNA Vaccination and Harmonized Diagnostics for Control of Fish Mycobacteriosis** *D. Morick: U Haifa , N. Zmora: UMBC , D. Barkan: U Hebrew , A. Diamant: U Haifa , A.R. Place: U MD, CES*	Approved: $180,000 *Aquaculture*
US-5837-26PA	**Advanced Disease Control Approaches for Important Warmwater Cultured Fish Species** *T. Bruce: U Auburn , O. Shapiro: ARO, Min. Ag. , T. Garlock: U Auburn , M.R. Liles: U Auburn , E. Cytryn: ARO, Min. Ag.*	Approved: $570,000 *Aquaculture*

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IS-5841-26PAR 5576	**Multi-omics characterization of stress responses in the red seaweed *Gracilaria cornea* to enhance commercial robustness of agar production** *N. Segal: Isr. Ocean. Res. , D. Bhattacharya: U Rutgers , E. Solomon: Isr. Ocean. Res.*	Approved: $570,000 *Aquaculture*
IS-5852-26F	**Biocontrol of the Asian Citrus Psyllid Using Local and Introduced *Tamarixia spp*. Parasitoids: Field Evaluation and Predictive Modeling** *R. Kaspi: ARO, Min. Ag. , M.P. Daugherty: UC, Riverside , R. Sharon: MIGAL R&D*	Approved: $180,000 *Crop Health and Invasive Species*
IS-5853-26F R 5740	**Examination of the potential involvement of stigma exudate exRNAs in regulating flower pollination and fire blight disease resistance** *Y. Leshem: MIGAL R&D , G. Sundin: U Michigan St.*	Approved: $180,000 *Crop Health and Invasive Species*
IS-5860-26P	**Biosurfactants as foliar spray agents for sustained health of plants and their leaf microbiomes** *N. Kashtan: U Hebrew , J. Leveau: UC, Davis , Y.G. Mishael: U Hebrew*	Approved: $570,000 *Crop Health and Invasive Species*
IS-5862-26PDC 5516	**Improvement of water use efficiency and salt tolerance by loss of function of tomato Rho Of Plant (ROP) GTPases** *S. Yalovsky: U Tel Aviv , J.I. Schroeder: UC, San Diego , N. Sade: U Tel Aviv*	Approved: $500,000 *Crop Production*
IS-5863-26PD	**Harnessing cytonuclear and advanced breeding for developing adapted barley cultivars for Desert Farming** *E. Fridman: ARO, Min. Ag. , X.F. Zhang: UC, Davis , V. Alchanatis: ARO, Min. Ag. , L. Mueller: Boyce Thompson*	Approved: $570,000 *Crop Production*
IS-5866-26P	**Next-generation breeding in citrus: a transgene-free, *in-planta* genome editing platform for developing high-priority traits** ***G. Kelly: ARO, Min. Ag.*** *, D.F. Voytas: U Minnesota*	Approved: $570,000 *Crop Production*
IS-5872-26PD	**Harnessing wild wheat relatives: Multi-omics integration of seed and root metabolism in *Aegilops longissima* for improving bread wheat** *Y. Brotman: U Tel Aviv , S. Rhee: U Michigan St. , N. Sade: U Tel Aviv*	Approved: $570,000 *Crop Production*
IS-5875-26PD	**Male Sterility in Tomato Under Temperature Stress, and the Role of Reproductive phasiRNAs** *H. Yasuor: ARO, Min. Ag. , B.C. Meyers: UC, Davis*	Approved: $180,000 *Crop Production*
IS-5877-26PD	**Mechanisms of heat stress tolerance in apple** ***Y. Grunwald: ARO, Min. Ag.*** *, A. Malladi: U Georgia ,* ***V. Bloch: ARO, Min. Ag.***	Approved: $570,000 *Crop Production*

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IS-5891-26P	**UPR-TOR Regulation of Root Foraging in Soil Pore Structure: Linking Phosphate Uptake to Soil Carbon Dynamics** ***M. Dor: U Ben Gurion*** *, F. Brandizzi: U Michigan St. ,* ***R. Danieli: U Michigan St.***	Approved: $570,000 *Environment/Water/Renewable Resources*
IS-5899-26P	**Taming the soil microbiota for optimal nitrogen use efficiency in crops** *A. Erez: U Hebrew , A.D. Kent: U Illinois , O.M. Finkel: U Hebrew , D. Yalin: ARO, Min. Ag. , C. Sible: U Illinois , F.E. Below: U Illinois*	Approved: $570,000 *Environment/Water/Renewable Resources*
IS-5916-26P C 5524	**Enhancing the Quality and Shelf Life of Tomato Fruit Through Precision Modulation of the ABA-Cytokinin Balance** *A. Goldshmidt: ARO, Min. Ag. , J.K. Rose: U Cornell , P. Berman: ARO, Min. Ag. , C. Ziv: ARO, Min. Ag.*	Approved: $500,000 *Food Product-Safety, Security, Quality*
IS-5927-26P	**Merging Sensory, Chemical, and Genomic Approaches to Improve Strawberry Flavor** *N. Dai: ARO, Min. Ag. , V. Whitaker: U Florida , I. Maoz: ARO, Min. Ag. , Y. Wang: U Florida , S. Lee: U Florida*	Approved: $570,000 *Food Product-Safety, Security, Quality*
IS-5928-26P C 5444	**AI-Optimized Antifungal Peptides and Smart Delivery Systems for Postharvest Pathogen Management** *N. Alkan: ARO, Min. Ag. , D. Shah: Danforth Center ,* ***H. Barhum: Triangle R&D***	Approved: $500,000 *Food Product-Safety, Security, Quality*
IS-5933-26P	**Unravelling Genetic and Regulatory Networks of Azole Resistance in *Aspergillus flavus* to Enable Sustainable Crop Protection** *E. Sionov: ARO, Min. Ag. ,* ***M. Drott: USDA, ARS***	Approved: $570,000 *Food Product-Safety, Security, Quality*