2025 Integrated Solutions 'A' Priority Nominations

Plant Pathology

Print Date: 9/2/2025

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00513	A	ONION (DRY BULB) (03-07A=ONION, BULB SUBGROUP)	Fusarium Diseases (Fusarium spp.)	Orgnc	Tonnessen,Brad (CO)	TerraMG (A & B); TS601 (Methylorubrum populi strain NLS0089); Biotrinsic X19

NorthEast Region	NorthCentral Region	Southern Region	Western Region	A

Nomination Justification (2025 CA) same;

PCR Reason For Need Recently, in both Utah and Western Colorado, we have noticed an increase in incidence of Fusarium diseases in dry bulb onion crops. We believe to have diagnosed the pathogen as Fusarium proliferatum. Currently, organic producers' management strategies are not successful in mitigating this disease. We are interested in identifying organic solutions to this issue.

PCR Detail We hope to employ the usage of organic agricultural products, cultural methods, and soil moisture sensing to identify solutions. Antifungal products will include biologicals that include species such as Trichoderma. We also know that water management can have a profound effect on disease severity. Thus, irrigation scheduling and amount will need to be monitored based on consumptive use.

Comments HQ suggest including the following products in the study if feasible: TerraMG (Natural ATIC), Biotrinsic X19 (Kosakonia cowanii), TS601 (Methylorubrum populi); trials must conducted in historically infested fields [NC: 6/25 DS]

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00491	A	ONION (03-07AB=ONION BULB AND GREEN SUBGROUPS)	Stemphylium spp.	Resis	Cochran,Kimberly (TX) ; Heck,Daniel (NY) ; Woodhall,James (ID)	MycoV-43TM Pro-Leaf; PHC25279

NorthEast Region	A	NorthCentral Region		Southern Region	A	Western Region

Nomination Justification (2025 MD) see previous comments;(2025 FL) See previous comments.;

PCR Reason For Need Resistance has developed in many of the fungicides in several regions throughout the US including New York, Michigan, Idaho and Eastern Oregon. Severe losses occurred in the last two states (collectively known as the Treasure Valley) in 2023 which also resulted in secondary bacterial bulb rots.As Stemphyllium has only occurred since 2019 in Idaho and Eastern Oregon there is limited trial data for cultural and chemical control. Presently Pristine and Luna fungicides. The Treasure Valley of Idaho and Eastern Oregon is the leading onion producing area in the US accounting for up to 30% in yield. Typically the dry and warm climate is conducive to onion production but since 2020 there have been outbreaks of Stemphyllium leaf blight (SLB). In 2020 this outbreak infected the leaf tips and caused defoliation resulting in yield losses. In 2023, infection occurred later closer to harvest, this resulted in onion leaves dying effectively 'standing up'. This enabled secondary bacterial rots to establish in the bulbs resulting in significant quality losses and lack of storability. Control of SLB is typically through chemical control, notably using Pristine and Cabrio– which are used routinely for Botrytis anyway. However, resistance to these products have been observed in the Treasure Valley and elsewhere (New York and Michigan) for SLB. SLB is a relatively new issue to the Treasure Valley, therefore there is limited trial data investigating both cultural and chemical control options. With fungicide resistance present in the key chemical options, field trials for cultural control as well as alternative fungicides with a view to resistance management is required. [ID: 8/24/DS]

PCR Detail Requester would like to test products only.

Comments HQ suggests exploring the following options: 1) PHC 25279 (PDHP25279) and 2) MycoV43 (a natural product extract from an estuarine bacterium) [HQ: 8/24/DS]. Prothioconazole has also demonstrated very good results. Preliminary data available on PDMR reports. Most of FRAC 7 and 11 products are not effective to manage this disease. Most labeled FRAC 3 have shown decrease in efficacy [NY: 7/25 AA].

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00347	A	LEAFY VEGETABLES (04-16=LEAFY VEGETABLE GROUP)	Cercospora Diseases (Cercospora spp.)	Orgnc	McGrath,Margaret (NY) ; Scheufele,Susan (MA) ; Misbakhul,Munir (MS)	Serenade Opti

NorthEast Region	B	NorthCentral Region		Southern Region	A	Western Region

Nomination Justification (2025 MD) ;(2025 FL) See previous comments.;

PCR Reason For Need (8/18/2020) McGrath,Margaret: Common disease. Double Nickel and LifeGard are additional potential products.

PCR Detail

Comments

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00304	A	LETTUCE (HEAD & LEAF) (04-16A=LEAFY GREENS SUBGROUP)	Downy Mildew (All species)	Orgnc	McGrath,Margaret (NY) ; Matheron,Michael (AZ)	LifeGard WG; SP2700 (In development)

NorthEast Region	B	NorthCentral Region	Southern Region	Western Region	A

Nomination Justification (2025 CA) same;(2025 MD) ;

PCR Reason For Need

PCR Detail

Comments

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00434	A	LETTUCE (GH) (04-16A=LEAFY GREENS SUBGROUP)	Viruses (General)	Organic/P PWS	Clarke,Jennifer (CA) ; Gebiola,Marco (CA) ; Cadby,Jeana (CA)	

NorthEast Region	NorthCentral Region	Southern Region	Western Region	A

Nomination Justification (2025 CA) same;

PCR Reason For Need Impatiens necrotic spot virus is threatening the CA lettuce industry. Max allowable sprays of Lannate insecticide for thrips vectors are the only control available. Priming plant defenses with chitin/chitosan-based inducers is a viable alternative [CA: 08/22 AA]. Thrips and INSV can be an issue in greenhouses and move to the field in transplanted lettuce. Can this request be expanded to the field as well? [CA: 05/25 AA]. Opportunities to control and prevent the spread of INSV are critical. Limited materials are available to control INSV and improving efficacy of existing products or identifying alternatives would support the industry greatly [CA 05/15 AA].

PCR Detail

Comments

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00509	A	LETTUCE (HEAD & LEAF) (04-16A=LEAFY GREENS SUBGROUP)	Fusarium Diseases (Fusarium spp.)	PPWS	Heck,Daniel (NY) ; Tamayo,Evan (CA)	RootShield Plus WP; Ongard; Plant and Soil Pro-2

NorthEast Region	A	NorthCentral Region		Southern Region	A	Western Region	A

Nomination Justification (2025 CA) same;(2025 MD) see previous comments;(2025 FL) See previous comments.;

PCR Reason For Need Lettuce (Lactuca sativa) is the fourth most valuable agricultural commodity in California, contributing nearly $4 billion annually in farm gate value (Davis et al., 2023). Intensive production has facilitated the emergence and spread of Fusarium wilt of lettuce, caused by Fusarium oxysporum f. sp. lactucae (FOL). This soilborne fungal pathogen is now widespread across all major lettuce production regions in California and Arizona and is regarded by growers and researchers alike as one of the most serious disease threats to the crop. [CA 05/25/ds]

PCR Detail Evaluate the combined effects of a microbial fungicide, soil-applied biostimulant, and foliar-applied protein hydrolysate under field conditions that reflect real production challenges. The cornerstone of the disease management program is RootShield® Plus WP (Trichoderma harzianum strain T-22 and Trichoderma virens strain G-41). These fungal strains are known for their ability to suppress soilborne pathogens through mechanisms such as mycoparasitism, competition, and activation of induced systemic resistance. However, the success of Trichoderma-based products depends heavily on their ability to establish and colonize the rhizosphere early in crop development. To improve colonization and enhance rhizosphere conditions, Plant & Soil Pro 2, a plant-based organic biostimulant will be co-applied via chemigation with RootShield at 24 gal/acre, split between irrigation events. This product promotes microbial activity and root zone health, enriching the environment in which Trichoderma species must establish. A transplant drench with RootShield® Plus WP at 2 lb/A will be administered to ensure early root colonization, a critical period when the lettuce plant is most vulnerable to Fusarium wilt infection. Additionally, ONGard, a foliar-applied protein hydrolysate, will be included in the program to improve systemic plant defenses and support overall vigor. Protein hydrolysates have been shown to enhance nutrient uptake, root development, photosynthesis, and tolerance to stress conditions. ONGard will be applied at 16 fl oz/acre and 32 fl oz/acre at key vegetative growth stages to maximize physiological performance and resilience against disease. This product combination has shown strong promise in prior field applications for managing Fusarium wilt in other susceptible crops, such as celery. [CA: 05/25 DS]

Comments FW is difficult to manage, even for conventional systems. It is present in NY and there are no effective products available. The suggested program is promising [NY: 7/25 AA].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00486	A	SOYBEAN (06-22=LEGUME VEGETABLES (SUCCULENT OR DRIED) GROUP)	Fusarium luffae	PPWS	Solanki,Shyam (SD)	TerraMG (A & B); MycoV-43TM Pro-Leaf; Azoxystrobin; Penthiopyrad; Vismax

NorthEast Region	NorthCentral Region	Southern Region	Western Region
	A		

Nomination Justification (2025 MI) See Prev;

PCR Reason For Need REASON FOR NEED: The requester has recently identified an occurrence of Fusarium luffae in South Dakota soybean fields. This pathogen has been identified for the first time in the USA by his lab in South Dakota, and currently, no product or biocontrol is labeled for it. Previously, Fusarium luffae was identified in China; however, he noted a more severe disease-causing isolate from USA fields. This isolate's symptoms resemble herbicide injury, making it very hard to identify in the early stages of plant growth. Currently, no fungicide is specifically labeled for it. At this point, there may not be a widespread occurrence of the pathogen, but Fusarium is notoriously known for scaling up rapidly. Considering soybean is an important rotation crop in the Midwest USA, there is an urgent need to test the available chemistry and biocontrols that can effectively be used against this pathogen species. [SD: 8/24/ DS].

PCR Detail PROPOSED RESOLUTION: The requester is proposing to test chemicals and biological peptides to determine their efficacy on collected isolates of Fusarium luffae on different commercially available soybean varieties. The proposed treatments include different concentrations of: 1) Azoxystrobin, 2) Penthiopyrad, and 3) Vismax (Flg22-Bt Peptide). [SD: 8/24/ DS].

Comments HQ suggests including these additional treatments: 1) Mycov-43, and 2) TerraMG (Natural AITC). [HQ: 8/24/ DS].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00524	A	BEAN, LIMA (SUCCULENT & DRIED SHELLED) (06-22CE=SUCCULENT SHELLED, PULSES DRIED SHELLED BEAN, EXCEPT SOYBEAN SUBGROUPS)	Nematode, Root Knot (Meloidogyne spp.)	PPWS	Betts,Alyssa (DE)	TerraMG (A & B); PHC68949; YSY; MBI-306 EP; Biostate 10% WP; Velum rise; BiointrinsicZ15; RevoCURB; Vydate; Salibro

NorthEast Region	A	NorthCentral Region	Southern Region	Western Region

Nomination Justification (2025 MD) see requestor comments;

PCR Reason For Need Root knot nematode populations are very high across lima bean production acreage in DE. The wide host range of RKN further complicates management as populations have continued to increase. RKN is the major issue for lima bean growers and without new solutions will continue to lead to reduced acreage in production [DE: 7/25 DS].

PCR Detail Open to trying any combination or product that looks promising. Have heard some grower interest in Vydate, not sure if registrant is looking to add more crops. Requester suggest testing the following projects: 1) Vydate (Oxamyl): 4 pt/A in furrow (with 5-10 GPA in spray volume in furrow) at plant or broadcast spray (with 15-20 GPA); 4 applications; 7-day retreatment interval, 2) Salibro (Fluazaindolizine): 30.7 to 61.4 fl. oz/A soil directed spray in 15-20 GPA followed by irrigation; Max 2 applications at 14-day interval or 61.4 fl. oz per calendar year [DE: 7/25 DS].

Comments Vydate L / Vydate C-LV and Salibro appear to not be registered on beans at present. HQ suggests to also consider the following products for testing: 1) PHC68949: Contact registrant for use pattern, 2) MBI-306 EP (Inactivated Burkholderia rinojensis strain A396 cells and spent fermentation media) is registered for use on Lima bean for management of RKN so this can be used as Reg std as well as in integrated approach. Follow the label direction for the use pattern depending on appropriate application method, 3) Biostate 10% WP (Purpureocillium lilacinum strain PL11): 2 lb/A; Can be applied as drip, flood/furrow applications, banded spray or drench at and after planting at 7-day interval; Thoroughly wet soil into the root zone with sufficient water during or immediately after application, 4) Velum rise (Fluopyram + Penflufen): 13 fl. oz/A in-furrow application before seed is covered. Max one application, 5) YSY: Contact MFG for use pattern, 6) TerraMG: Contact MFG for use pattern, 7) BiointrinsicZ15 (Streptomyces sp. strain SYM00257): Registered for use on Lima Bean for suppression of RKN. Seed treatment rate of 1.14 oz/cWT seeds. Need to make sure resources are available for seed treatment, 8) OMRI listed RevoCURB (Thyme, Clove, Garlic & Cinnamon oil): 5 gallons/A; Soil broadcast spray or soil incorporated in min of 300 GPA water volume: irrigate with water to achieve 6-12 inches of product penetration [NC: 7/25 DS].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00050	A	FRUITING VEGETABLES (08-10=FRUITING VEGETABLE GROUP)	Phytophthora Blight (P. capsici)	PPWS	Zhang,Shouan (FL) ; Aglave,Balaji (FL) ; McGrath,Margaret (NY) ; Higgins,Doug (VA) ; Robbins,Chanz (NM) ; Hayter,Jensen (TN)	

NorthEast Region	B	NorthCentral Region		Southern Region	A	Western Region	A

Nomination Justification (2025 CA) SAME;(2025 FL) See previous comments.;(2025 MD) ;

PCR Reason For Need Important disease.

PCR Detail Guarda is a new product to consider evaluating.

Comments Phytophthora is constant threat and occasional issue in NM [NM: 05/25 AA]. Tennessee is a major producer of fruiting vegetables in the Southeast. Phytophthora is a major issue for growers in Tennessee [TN: 7/25 AA]. Phytophthora capsici is a devastating oomycete infecting fruiting vegetables in FL and other areas, esp. during the days with heavy rainfall. There are no resistant cultivars commercially available for these crops. Even fungicide treatments cannot save these crops under conducive conditions [FL: 8/25 AA].

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00099	A	FRUITING VEGETABLES (08-10=FRUITING VEGETABLE GROUP)	Bacterial Diseases	Orgnc	Zhang,Shouan (FL) ; McGrath,Margaret (NY) ; Ivey,Melanie (LA) ; Sanabria-Velazquez,Andres (OH) ; Shantharaj,Deepak (AL)	Double Nickel LC; BacStop; Procidic

NorthEast Region	B	NorthCentral Region	A	Southern Region	A	Western Region	

Nomination Justification (2025 FL) See previous comments.;(2025 MI) See Prev;(2025 MD) ;

PCR Reason For Need

PCR Detail

Comments Managing bacterial diseases remains one of the greatest challenges to tomato growers. Their management largely relies on copper bactericides. However, control by copper is often marginal or ineffective due to the conducive weather and resistant strains. This is even worse for organic production [FL: 8/25 AA]. In Alabama, field-grown tomatoes yield 8,000–16,000 lb/acre through integrated pest management. Bacterial speck, spot, and canker persist due to a lack of host resistance and copper pesticide resistance [AL: 8/25 AA].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00089	A	TOMATO (08-10A=TOMATO SUBGROUP)	Bacterial Diseases	Resis	Zhang,Shouan (FL) ; McGrath,Margaret (NY) ; Hausbeck,Mary (MI) ; Higgins,Doug (VA) ; Heck,Daniel (NY) ; Sanabria-Velazquez,Andres (OH) ; Shantharaj,Deepak (AL)	SP2480 (In development); BW165E; PHC25279

NorthEast Region	B	NorthCentral Region	A	Southern Region	A	Western Region

Nomination Justification (2025 FL) See previous comments.;(2025 MI) See Prev;(2025 MD) ;

PCR Reason For Need More data needed? P10713 PPWS Bacterial Diseases / Fruiting Vegetables (GH Transplants): After a two year study, at 15 locations; the only effective products were antibiotics. Also see Biopesticide project results, tested in the field. Extremely difficult to register antibiotics at this time, on annual crops. Looking for other new solutions. SPOT is the key problem. Efforts start in the GH (8/16/2020): These diseases are hard to manage with copper. Speck and Canker are most important in Northeast. [NY: N/A / DS]

Copper products have consistently shown low to no efficacy in managing bacterial specks in tomatoes. Growers excessively apply copper-based products without results. Efficacy data for new products are needed. [NY: 07/24 / DS]. HQ suggest inclusion of BW165E WP (Ulocladium oudemansii strain U3), SP2480, PHC25279 (PDHP 25279). [NC 8/24/ DS].

PCR Detail

Comments Managing bacterial diseases in tomato remains challenges esp. in areas like FL with moist warm weather. Resistant cultivars are not commercially available. Management largely relies on copper. However, control by copper is often marginal or ineffective due to weather and resistant pathogens [FL: 8/25 AA]. There are really few products available for bacterial diseases. In Ohio, there has been observed an increase in the resistance to cooper products [OH: 8/25 AA]. In Alabama, field-grown tomatoes yield 8,000–16,000 lb/acre through integrated pest management. Bacterial speck, spot, and canker persist due to lack of host resistance and copper pesticide resistance [AL: 8/25 AA].

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00095	A	PEPPER (BELL & NONBELL) (08-10BC=PEPPER/NON-BELL PEPPER/EGGPLANT SUBGROUPS)	Bacterial Spot (Xanthomonas)	Orgnc	McGrath,Margaret (NY) ; Sanabria-Velazquez,Andres (OH) ; Shantharaj,Deepak (AL)	Double Nickel LC; BacStop; Procidic

NorthEast Region	B	NorthCentral Region	A	Southern Region	A	Western Region

Nomination Justification (2025 MI) See Prev;(2025 FL) See previous comments.;(2025 MD) ;

PCR Reason For Need

PCR Detail

Comments In Alabama, Bell pepper yields range 18-46 tons per acre with integrated pest management strategies. Bacterial spot disease persists due to a lack of host resistance and resistance to copper pesticide [AL: 8/25 AA].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00098	A	CUCURBIT VEGETABLES (09=CUCURBIT VEGETABLES GROUP)	Angular leaf spot (Xanthomonas; Erwinia carotovora)	PPWS	McGrath,Margaret (NY) ; Cochran,Kimberly (TX)	

NorthEast Region	B	NorthCentral Region	Southern Region	A	Western Region

Nomination Justification (2025 FL) See previous comments.;(2025 MD) ;

PCR Reason For Need few options (8/18/2020) McGrath,Margaret: Important disease. Guarda is a new potential product.; This is a significant problem in TX pickle cucumber production.[TX, 08/23]. JPB 08/23;The request is for fusarium root rot.

PCR Detail

Comments

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00097	A	CUCURBIT VEGETABLES (GH) (09=CUCURBIT VEGETABLES GROUP)	Angular leaf spot (Xanthomonas; Erwinia carotovora)	Orgnc	McGrath,Margaret (NY) ; Shantharaj,Deepak (AL)	Double Nickel LC; BacStop; Procidic

NorthEast Region	B	NorthCentral Region	Southern Region	A	Western Region

Nomination Justification (2025 FL) See previous comments.;(2025 MD) ;

PCR Reason For Need

PCR Detail

Comments Alabama growers cultivate squash and pumpkin year-round, but angular leaf spot remains a challenge due to lack of host resistance and copper pesticide resistance [AL: 8/25 AA].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00126	A	CUCURBIT VEGETABLES (09=CUCURBIT VEGETABLES GROUP)	Blight (All species)	Orgnc	Straw,Allen (VA)	

NorthEast Region		NorthCentral Region		Southern Region		Western Region
				A		

Nomination Justification (2025 FL) See previous comments.;

PCR Reason For Need

PCR Detail

Comments

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00302	A	CUCURBIT VEGETABLES (09=CUCURBIT VEGETABLES GROUP)	Phytophthora blight	Orgnc	Zhang,Shouan (FL) ; McGrath,Margaret (NY) ; Sciarrotta,Laura (NJ) ; Sanabria-Velazquez,Andres (OH)	

NorthEast Region		NorthCentral Region		Southern Region		Western Region
	A		A		A	

Nomination Justification (2025 MD) see previous comments;(2025 FL) See previous comments.;(2025 MI) See Prev;

PCR Reason For Need Important disease. There are other projects on this disease [NY: 8/20 AA].

PCR Detail

Comments Phytophthora capsici is a devastating oomycete infecting fruiting vegetables in FL and other areas, esp. during the days with heavy rainfall. There are no resistant cultivars commercially available for these crops. Even fungicide treatments cannot save these crops under conducive conditions [FL: 8/25 AA]. Phytopthora is one of the most important and devastating diseases in cucurbits in Ohio. Very few products are avaialable for organic growers [OH: 8/25 AA].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00521	A	CUCUMBER (09B=SQUASH/CUCUMBER SUBGROUP)	Anthracnose (Colletrotrichum spp.)	PPWS	Rahman,Mahfuz (WV)	Badge SC; Aprovia

NorthEast Region	NorthCentral Region	Southern Region	Western Region
A			

Nomination Justification (2025 MD) see requestor comment;

PCR Reason For Need Existing fungicidal recommendations are not effective especially on cultivars having low/no resistance [WV: 7/25 DS].

PCR Detail Requester is suggesting to explore an integrated approach that will include treatment rotations, drip irrigated plastic mulched beds or other mulch options, resistant varieties and more effective control products. Requester suggested testing Aprovia (Benzovindiflupyr); 7 fl. oz/A in 100 GPA; 3 applications at 10-day re-treatment interval [WV: 7/25 DS].

Comments Aprovia appears not registered for cucumbers at present but it is labeled for the control of anthracnose in other crops. HQ suggest these additional products for consideration: 1) Badge SC (Copper hydroxide + Copper Oxychloride): Registered product, can be used as std. control and in an integration with other control tools. Use 2.5 pints/A; Max application rate/year: 18.4 pints/A; 7-day retreatment interval; Begin application before disease development [NC: 7/25 DS].

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00092	A	APPLE (11-10=POME FRUIT GROUP)	Scab, Apple (Venturia inaequalis)	PPWS	Green,Thomas (WI) ; Futrell,Sue (WI) ; Cooley,Daniel (WI)	CheckMate CM; Isomate-C Plus; Kaligreen; Serenade Opti; Regalia; Avenger

NorthEast Region	NorthCentral Region	Southern Region	Western Region
	A		

Nomination Justification (2025 MI) See Prev;

PCR Reason For Need

PCR Detail

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00140	A	PEAR (11-10=POME FRUIT GROUP)	Fire Blight (Erwinia amylovora)	Orgnc	Peter,Kari (PA) ; Birmingham,Deirdre (WI) ; Frank,Daniel (VA)	

NorthEast Region	B	NorthCentral Region		Southern Region		Western Region	A

Nomination Justification (2025 CA) same;(2025 MD) ;

PCR Reason For Need

PCR Detail

Comments

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00324	A	APPLE (11-10=POME FRUIT GROUP)	Fire Blight (Erwinia amylovora)	PPWS	Green,Thomas (WI) ; Futrell,Sue (WI) ; Cooley,Daniel (WI) ; Frank,Daniel (VA) ; Hayter,Jensen (TN)	Kaligreen; Serenade Opti; Regalia

NorthEast Region		NorthCentral Region	A	Southern Region	A	Western Region	A

Nomination Justification (2025 CA) SAME;(2025 FL) See requestor comments.;(2025 MI) See Prev;

PCR Reason For Need few options

PCR Detail

Comments

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00452	A	APPLE (11-10=POME FRUIT GROUP)	Bitter Rot (Colletotrichum spp.)	Orgnc	Acimovic,Srdan (VA)	Howler; Theia; Nutriphite Magnum; Kendal Fertilizer & Biostimulant; Brexil CA

NorthEast Region	NorthCentral Region		Southern Region	Western Region
		A		

Nomination Justification (2025 MI) See Prev;

PCR Reason For Need Reason for need: To identify fungicide materials with new effective modes of action against Colletotrichum species so as to implement them in summer spray programs and thus prevent resistance development to currently effective strobilurin fungicides (FRAC 11) [VA 8/23]. Refer to the original request for details on the proposed use patterns [JB 8/23].

PCR Detail Comments

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00465	A	APPLE (11-10=POME FRUIT GROUP)	Fire Blight (Erwinia amylovora)	Orgnc	Acimovic,Srdan (VA) ; Robbins,Chanz (NM)	NSTKI-028; NSTKI-043

NorthEast Region	NorthCentral Region		Southern Region	Western Region	
		A			A

Nomination Justification (2025 MI) See Prev;(2025 CA) same;

PCR Reason For Need Reason for need: Implementing alternatives for avoiding antibiotic resistance (streptomycin, oxytetracycline) [VA: 8/23]. Refer to original request for the proposed use patterns [JB: 8/23]. This is an issue in organic production in Norther NM [NM: 05/25 AA].

PCR Detail Comments

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00466	A	PEAR (11-10=POME FRUIT GROUP)	Fire Blight (Erwinia amylovora)	Orgnc	Acimovic,Srdan (VA)	NSTKI-028; NSTKI-043

NorthEast Region		NorthCentral Region		Southern Region		Western Region	A

Nomination Justification (2025 CA) same;

PCR Reason For Need Reason for need: Implementing alternatives for avoiding antibiotic resistance (streptomycin, oxytetracycline) [VA: 8/23]. Refer to original request for the proposed use patterns [JB: 8/23].
Pest updated from Early Blight to Fire Blight 07/24/ds

PCR Detail

Comments

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00469	A	APPLE (11-10=POME FRUIT GROUP)	Fire Blight (Erwinia amylovora)	Resis	Zeng,Quan (CT)	Benzisothiazolinone; RejuAgro

NorthEast Region	B	NorthCentral Region	A	Southern Region		Western Region	A

Nomination Justification (2025 CA) SAME;(2025 MI) See Prev;(2025 MD) ;

PCR Reason For Need Traditionally fire blight was controlled by antibiotics such as streptomycin and oxytetracycline, however, the pathogen has developed resistance and the resistant pathogen populations have been spread to many regions in the U.S. Growers in regions where streptomycin resistant Erwinia amylovora is widely present are desperate to find control alternatives for fire blight. It was shown that strep resistant Erwinia is susceptible to Benzisothiazolinone due to the difference in modes of action. Therefore, it provides an excellent tool for managing streptomycin resistance in E. amylovora. 06/24/drs
The Chinese manufacturer of benzisothiazolinone is can be found at http://www.htteam.com/pro_l.aspx?id=52
The MFG must be capable of obtaining the required approval to get the unregistered pesticide in the U.S. before Benzisothiazolinone can be considered for IR4 testing. Alternative resolutions may be considered 07/24/drs
RejuAgro added to potential products list as an HQ suggestion 07/24/ds

PCR Detail

Comments

2025 Integrated Solutions 'A' Priority Nominations

Plant Pathology

Print Date: 9/2/2025

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00487	A	PEACH (12-12B=PEACH SUBGROUP)	Cytospora	Orgnc	Tonnessen,Brad (CO) ; Cochran,Kimberly (TX) ; Hayter,Jensen (TN)	Tenet WP; Asperello T34; SilMatrix; RootShield Plus WP; BlueGold Silica; Volcanic Tuff

NorthEast Region	NorthCentral Region	Southern Region		Western Region	
			A		A

Nomination Justification (2025 CA) same;(2025 FL) See previous comments.;

PCR Reason For Need REASON FOR NEED: Increasing incidence of drought and unseasonable freeze events are exacerbating the spread of Cytospora canker on peach trees. The pathogen, Cytospora plurivora, infects injured above-ground bark tissue caused by pruning or micro fissures caused by freezing. Losses are currently estimated at 15-20% per year. Mitigating Cytospora canker damage is a priority for growers in the region, and there is currently no effective treatment. In organic production, the fungicidal treatment Lime Sulfur (NovaSource, Calcium Polysulfide) serves as a disinfectant to temporarily prevent infection. This application can diminish beneficial organism populations and promote fungicide resistance. Since this is the only current solution for organic growers, there is a need for diversification of products and approaches. [CO: 8/24/ DS].

PCR Detail PROPOSED RESOLUTION: In recent exploratory studies at the Western Colorado Research Center – Rogers Mesa, we have discovered promising new treatments of both biorational and host defense priming categories. The biorational approach involved introduction of spores from a Trichoderma spp. isolated from bark in a local peach orchard. The subsequent inoculation of C. plurivora 24-hours later resulted in less disease compared to positive controls (Water treated, inoculated). Additionally, we tested compounds that are known/hypothesized to induce plant defenses (Silica (Volcanic Tuff), Seaweed Extract A. nodosum, Crustacean meal, Regalia (Marrone Bio Innovations)). These were applied one week prior to inoculating with C. plurivora to test residual effectiveness. Of each compound tested, Silica exhibited a statistically significant reduction in lesion size, comparable to the industry standard fungicide, Lime Sulfur. Currently, products containing silica or Trichoderma are not labelled for peach cytospora canker.

PROPOSED TREATMENTS: 1) RootShield Plus WP (Trichoderma harzianum strain T-22 + T. virens strain G-41), 16-32 oz/A, broadcast spray at post petal-fall & early dormancy stages, 14-day RTI; 2) Tenet WP [Trichoderma asperellum (ICC012) + T. gamsii ICC080)], 3.75 lb/A in 10-100 GPA broadcast spray at post petal-fall & early dormancy stages; 7-day RTI, 3) Asperello [Trichoderma asperellum strain T34], 7 oz/A foliar application in 50-107 GPA, apply at post petal-fall & early dormancy stages, 7-day RTI; 4) SilMatrix [Potassium silicate], 62.5% solution foliar application in 50-250 GPA at post petal-fall & early dormance stages, 7-day RTI; 5) BlueGold Silica [Silicon Dioxide], 20 oz/A foliar application in 21 GPA at post petal-fall & early dormancy stages; 6) Volcanic Tuff [Silicon Dioxide], 7 LB/A foliar application at post petal-fall & early dormancy stages. [CO: 8/24/ DS].

Comments Texas peach production has been challenged by extreme drought and freezing cycles the past several years, leaving them vulnerable [TX: 05/25 AA] Peaches are a small, but growing commodity in Tennessee. Better control options for Cytospora are needed. [TN 7/25 AA]

2025 Integrated Solutions 'A' Priority Nominations

Plant Pathology

Print Date: 9/2/2025

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00484	A	BLUEBERRY (HIGHBUSH) (13-07B=BUSHBERRY SUBGROUP)	Anthracnose (All species)	Resis	Isaacs,Rufus (MI)	JetAg; SilMatrix; Parka

NorthEast Region	NorthCentral Region	Southern Region	Western Region
A			

Nomination Justification (2025 MD) see previous comments;

PCR Reason For Need REASON FOR NEED: The most challenging diseases during harvest season for blueberries include Anthracnose fruit rot. There is evidence for resistance to pesticides, and there have been high economic impacts from it. Biopesticides, sterilants, and berry cuticle enhancers are being used by growers, or have been evaluated by MSU with promising results. These approaches can have multiple benefits, to delay resistance development, improve pest control, and reduce residues in relation to MRLs. [MI: 8/24/ DS].

PCR Detail PROPOSED RESOLUTION : The most challenging diseases during harvest season for blueberries include Anthracnose fruit rot. There is evidence for resistance to pesticides, and there have been high economic impacts from it. Biopesticides, sterilants, and berry cuticle enhancers are being used by growers, or have been evaluated by MSU with promising results. These approaches can have multiple benefits, to delay resistance development, improve pest control, and reduce residues in relation to MRLs. PROPOSED RESOLUTION: Use of sterilants such as JetAg and Oxidate can reduce pathogens to berries, greatly increasing fruit quality. SilMatrix and Parka have also been shown to reduce SWD infestation. These products need to be tested in combination with conventional programs to determine their potential for reducing residues, resistance, and infestation. These will also provide organic growers with information to support their fruit quality. PROPOSED USES: 1) JetAg (peroxyacetic acid) as a broadcast spray at 1 gal / 100 gal, 20-50 gpa, 4 applications, 3-day RTI, 0-day PHI; 2) SilMatrix (potassium silicate) as a broadcast spray at 1 gal / 100 gal, 20-50 gpa, 4 applications, 3-day RTI, 0-day PHI; 3) Parka (phospholipid blend) as a broadcast spray at 1 gal/A, 50 gpa, 4 applications, 0-day RTI, 3-day PHI. [MI: 8/24/ DS].

Comments HQ suggests integration of proposed testing materials with local conventional control programs. [HQ: 8/24/ DS]

2025 Integrated Solutions 'A' Priority Nominations

Plant Pathology

Print Date: 9/2/2025

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00522	A	BLUEBERRY (HIGHBUSH) (13-07B=BUSHBERRY SUBGROUP)	Phomopsis Twig Blight	PPWS	Miles,Timothy (MI)	Sovran; Aprovia Top; Luna Tranquility; Aprovia; Quadris Top; Endura Pro; Rally 40WSP

NorthEast Region	NorthCentral Region	A	Southern Region	Western Region

Nomination Justification (2025 MI) See Prev;

PCR Reason For Need Chlorothionil is a product that primarily controls almost all Phomopsis diseases in blueberries. Due to EPA restrictions on vulnerable soils we need alternative products to be labeled to control Phomopsis [MI: 7/25 DS].

PCR Detail Vulnerable soils are essentially a blueberry field as defined by the EPA, since chlorothionil is restricted we need products in FRAC 7 and 11 to fill the void. FRAC 3 materials are important but overlap with current mummy berry management. The purpose of this request is to identify effective 7 and 11 products on phomopsis twig blight. Requester is proposing the following treatments for testing: 1) Aprovia (Benzovindiflupyr): Foliar applications; 7 fl. oz/A in 40-80 GPA at 7-day interval; 2-4 applications, 2) Aprovia Top (Benzovindiflupyr + Difenoconazole): 13 fl. oz/A foliar application in 40-80 GPA at 7-day interval; Max 4 applications, 3) Quadris Top (Azoxystrobin + Difenoconazole); 14 fl. oz/A foliar applications in 40-80 GPA at 7-day interval, 4) Sovran (Kresoxim-methyl): 4.8 oz/A foliar applications in 40-80 GPA at 7-day interval, and 5) Endura Pro (Mefentrifluconazole + Boscalid): 20 fl. oz/A foliar applications at 7-day interval [MI: 7/25 DS].

Comments Aprovia and Aprovia Top are registered for blueberry lowbush only; Quadris top appears to be registered on blueberry for diseases other than Phomopsis twig blight; Sovran and Endura Pro appear not registered in blueberry. HQ suggests the following additional treatments for consideration: 1) Rally 40WSP (Myclobutanil): 5 oz/A foliar applications in 40-80 GPA at 7-day interval, 2) Luna Tranquility (Fluopyram + Pyrimethanil): 27 fl. oz/A foliar applications in 40-80 GPA at 7-day interval; 7-day PHI (This is registered for lowbush blueberry). Also, HQ recommends testing rotations of the proposed fungicides [NC: 7/25 DS].

2025 Integrated Solutions 'A' Priority Nominations

Plant Pathology

Print Date: 9/2/2025

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00512	A	KIWIFRUIT (13-07E=SMALL FRUIT VINE CLIMBING SUBGROUP, EXCEPT GRAPE)	Canker (All species)	Organic/P PWS	Reyes,Clarissa (CA)	BIO-TAM; Vintec; Lalitha 21; Oxidate 5.0

NorthEast Region	NorthCentral Region	Southern Region	Western Region	A

Nomination Justification (2025 CA) same;

PCR Reason For Need Fungal canker pathogens infect their hosts via pruning wounds during the dormant pruning season during precipitation (rain, dew, and heavy fog). Following precipitation events, fungal spores (sexual and asexual) become airborne and colonize exposed wood vessels caused by pruning. Total disease control is virtually unattainable because of the huge number of wounds made on an individual kiwifruit vine and extended period of wound susceptibility but one mitigation practice is to apply a protectant to exposed pruning wounds. Pruning wound protection is essential to prevent the infection of these pathogens. So far, no studies have addressed this on the kiwi crop in California.

PCR Detail Test bio-fungicides that are already labeled for use in grapevine after pruning to provide an organic control strategy to protect pruning wounds in kiwifruit against fungal pathogens associated with kiwi trunk diseases.

Comments HQ suggests including Oxidate 5.0 in the study if feasible; fungal canker is caused by Neofusicoccum spp., Diplodia spp., Diaporthe spp. (formerly Phomopsis), Phaeoacremonium spp., and Fusarium spp.; trials may be possible only with specific kiwifruit growing regions (mostly CA & limited West Oregon locations) [NC: 6/25 DS]

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00012	A	GRAPE (13-07F=SMALL FRUIT VINE CLIMBING SUBGROUP, EXCEPT FUZZY KIWIFRUIT)	Black Rot (Guignardia bidwellii)	Orgnc	Schilder,Annemiek (MI) ; Rahman,Mahfuz (WV) ; Hu,Mengjun (MD) ; Demchak,Kathy (PA) ; Mizuho,Nita (VA)	

NorthEast Region	A	NorthCentral Region	A	Southern Region	A	Western Region

Nomination Justification (2025 MD) see previous comments;(2025 FL) See previous comments.;(2025 MI) See Prev;

PCR Reason For Need (8/28/2020) Rahman,Mahfuz: Lime sulfur is often recommended by us, but there is no data available on the efficacy. Application of lime sulfur in pre-budbreak stage and Pristine during bloom should be evaluated for integrated option.

PCR Detail

Comments Black rot is a major barrier to the organic production of grapes on the eastern US. Several OMRI approved products have been labelled for its control, but efficacy data is limited. BR infection is known to occur during bloom until 6 weeks postbloom, which help narrow down timing of applications [MD: 9/20 AA]. Combinations of cultivar (including table grapes), cultural practice, and OMRI-certified fungicide use need to be investigated [VA: 08/25 AA].

2025 Integrated Solutions 'A' Priority Nominations

Plant Pathology

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00414	A	GRAPE (13-07F=SMALL FRUIT VINE CLIMBING SUBGROUP, EXCEPT FUZZY KIWIFRUIT)	Bitter Rot (Colletotrichum spp.)	PPWS	Rahman,Mahfuz (WV) ; Frank,Daniel (VA) ; Mizuho,Nita (VA)	

NorthEast Region	A	NorthCentral Region		Southern Region	A	Western Region

Nomination Justification (2025 FL) See requestor comments.;(2025 MD) see requestors comments;

PCR Reason For Need Testing Tebuconazole combined with different cultural practices such as effect of pruning, debris removal and application of lime sulfur prior to bud break. Many smaller growers do not want to buy more expensive chemistries due to cost considerations.

PCR Detail

Comments Currently, only captan and QoI fungicides are recommended; thus, other MOAs need to be tested [VA: 8/25 AA].

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00516	A	GRAPE (13-07F=SMALL FRUIT VINE CLIMBING SUBGROUP, EXCEPT FUZZY KIWIFRUIT)	Downy Mildew (All species)	PPWS	Higgins,Doug (VA) ; Holtappels,Dominique (NY)	

NorthEast Region	A	NorthCentral Region		Southern Region	A	Western Region

Nomination Justification (2025 MD) see requestor comments;(2025 FL) See requestor comments.;

PCR Reason For Need Downy mildews are devastating oomycete pathogens affecting grapevines, cucurbits, lettuce, and other crops globally, causing more than $7.5B in crop losses each year. Plasmopara viticola, commonly known as grapevine downy mildew, causes significant damage to grapevine foliage, reducing photosynthetic capacity, grape quality, and yield. Management strategies rely on fungicides, cultural practices, and resistant grapevine cultivars. Emerging fungicide resistance and environmental concerns are driving the need for novel approaches with the serviceable obtainable market size for a new control solution valued at over $520M. [NY: 7/25 DS]

PCR Detail Innatrix combines state-of-the-art artificial intelligence/machine learning (AI/ML) aided design, innovative biochemical production, and iterative real-world testing. The team has generated peptides and small proteins to safely, efficiently, and affordably combat P. viticola. As proof of concept, Innatrix has used modeling of the interaction between an affinity octapeptide and its target protein, oomycete cellulose synthase 2 (CesA2), to identify an improved peptide that shows control of downy mildew under lab conditions. A commercially viable product of this type will be made stable for field use, control disease at lower concentrations, and be produced at scale, inexpensively. [NY: 7/25 DS]

Comments Innatrix has confirmed that the proposed experimental products are still in the early stages of development. More finalized formulations and preliminary data will be needed before testing can be considered. HQ also suggests considering GWN12036 and GWN12025 for inclusion in the study [NC: 7/25 DS]. Downy mildew can be a severe problem in Georgia wine grape production [GA: 8/25 AA].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00526	A	GRAPE (13-07F=SMALL FRUIT VINE CLIMBING SUBGROUP, EXCEPT FUZZY KIWIFRUIT)	Black Rot (Guignardia bidwellii)	PPWS	Henn,Alan (MS) ; Miles,Timothy (MI) ; Cato,Aaron (AR)	Excalia; Proline; AC203; Tilt; Quash; Endura Pro; YSY; Funibiol Gold

NorthEast Region	A	NorthCentral Region	A	Southern Region	A	Western Region

Nomination Justification (2025 FL) See requestor comments.;(2025 MI) See Prev;(2025 MD) see previous comments;

PCR Reason For Need Increased restriction of the use of EBDCs from multiple fronts - EPA impending restrictions, restrictions from wineries and processors. We need additional solutions for black rot control for both organic and conventional use [MI: 7/25 DS].

PCR Detail The requester suggests screening the following products: 1) Tilt (Propiconazole): Foliar applications; 4 fl. oz/A in 40-80 GPA; Max 4 applications at 7-day interval, 2) Proline (Prothioconazole): 5 fl. oz/A foliar applications in 40-80 GPA; Max 4 applications at 7-day interval, 3) Quash (Metconazole): 4 fl. oz/A; Foliar applications; Max 4 applications, 4) Endura Pro (Mefentrifluconazole + Boscalid): 20 fl. oz/A Foliar applications; Max 5 applications at 7-day interval [MI: 7/25 DS].

Comments HQ suggests considering the inclusion of the following products in the study: 1) Funibiol Gold, 2) YSY, 3) AC203 [NC: 7/25 DS]. PHI is critical as disease increases approaching harvest. I prefer more modes be incorporated (e.g. the Funibiol Gold) and mefentrifluconazole mixes to reduce FRAC 3 tolerance. Are neutralized micronized sulfur (e.g. Microthiol Disperss) mixes safe on bunch/wine grapes in hot, humid, growing areas? Also suggest screening Excalia (inpyrfluxam) as suggested in PR#14048 [MS: 8/25 AA]. Black Rot is the primary disease concern of several hundred acres of wine grape, table grape, and muscadines in Arkansas. Options are currently limited for successful control and many growers struggle to find success currently in wet years, especially when considering table grapes [AR: 8/25 AA].

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00115	A	STRAWBERRY (13-07G=LOW GROWING BERRY SUBGROUP)	Rhizoctonia Diseases (Rhizoctonia spp.)	PPWS	Schilder,Annemiek (MI) ; Miles,Timothy (MI) ; Cochran,Kimberly (TX)	Sovran; Velum Prime; Rhyme; Pyraziflumid 20 SC

NorthEast Region		NorthCentral Region	A	Southern Region	A	Western Region	A

Nomination Justification (2025 CA) SAME;(2025 FL) See previous comments.;(2025 MI) See Prev;

PCR Reason For Need Few options; transplant production:sanitation efforts for clean stock field/other production:In TX&US, a major problem-lives many years in the soil&broad host range, which limits cultural control & creates a reliance on chemical/biologics Look at existing labels but with a different mode of action? New products?[TX 08/23] JPB, 08/23;

PCR Detail

Comments Proposed technologies to consider for testing by MI: 1) Rhyme (Flutriafol): 7 f. oz/A drench applications at 14-day interval; 2-4 applications in 40-80 GPA; PHI: 0-day and 2) Sovran (Kresoxim-methyl): Foliar applications; 6.4 oz/A; 2-4 applications at 7-day interval in 40-80 GPA. [MI: 7/25 DS] HQ suggests to also consider the following technologies: 1) Velum Prime (Fluopyram): 6.84 fl. oz/A; Drench/chemigation; RTI: 7 days; PHI: 0 days and 2) Pyraziflumid 20 SC (Pyraziflumid): Contact MFG for details. A PCR for Velum Prime (Fluopyram) / Strawberry (PR#13713) was received but for a different use pattern than what IR4 is proposing for this IS project. Flutolanil (FRAC code 7) has been tested under PR# 09102 with good E/CS results. [NC: 7/25 DS]

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00471	A	STRAWBERRY (13-07G=LOW GROWING BERRY SUBGROUP)	Fruit Rot (Botrytis cinerea and Colletotrichum spp.)	Organic/P PWS	Henn,Alan (MS) ; Hu,Mengjun (MD) ; Cato,Aaron (AR) ; Heck,Daniel (NY)	TerraMG (A & B); MycoV-43TM Pro-Leaf

NorthEast Region	A	NorthCentral Region		Southern Region	A	Western Region	A

Nomination Justification (2025 FL) See previous comments.;(2025 MD) see previous comments;(2025 CA) same;

PCR Reason For Need A significant challenge for many strawberry growers is fruit rot caused by Botrytis cinerea (gray mold) and Colletotrichum spp. (anthracnose). Current management strategies rely heavily on chemical fungicides. However, stringent regulatory restrictions on the use of synthetic chemicals due to concerns about environmental impact, human health, and the development of fungicide-resistant pathogen strains are limiting the options available to farmers for managing these crops. The available biofungicide options that are equivalent in efficacy, cost, and convenience are limited to none, posing an imminent threat to the sustainability of the livelihoods of these farmers. Using grant funding from NSF and USDA SBIR phase I programs, Mycologics has developed their proprietary biofungicide development platform called MycoV-43TM. One product from this platform, MycoV-43TM Pro-Leaf, is a foliar spray that has shown success in treating Cercospora leaf infections in sugar beet crops under greenhouse conditions (field trials are in progress at the University of Idaho and at USDA-ARS-Idaho). The product has also shown reduction in the growth of Botrytis cinerea and other plant pathogens in plate assays performed at USDA-ARS-Idaho. Based on these preliminary data, it would be interesting to test/validate the efficacy of MycoV-43TM Pro-Leaf in combating Botrytis and Colletotrichum infections in strawberry crops on open research plots. The total area of the experiments will be less than 5 acres, thereby meeting the <10 acre requirement for the EPA's Experimental Use Permit (EUP) waiver.
HQ suggests considering TerraMG (AITC) for this study too. [07/24/MD, 07/24/ds]
This project offers a potential alternative to fruit rot management in strawberries; preliminary data on MycoV-43TM is promising. [NY: 07/24, 08/24 ds].
We recently tested for resistance and several sites exhibited resistance to all single-site fungicides commonly used including Switch and group 7 fungicides which is common across the South [AR: 05/25 AA]. 2024 fungicide assays of Botrytis isolates from six Mississippi strawberry fields showed reduced efficacy or resistance to six common FRAC groups. Anthracnose samples from three fields showed reduced sensitivity to all tested FRAC groups. New approaches to managing these diseases need development [MS: 5/25 AA]

PCR Detail

Comments

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Plant Pathology

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00474	A	STRAWBERRY (13-07G=LOW GROWING BERRY SUBGROUP)	Nematode (Nematoda)	Organic/P PWS	Desaeger,Johan (FL)	

NorthEast Region	NorthCentral Region	Southern Region	Western Region
		A	

Nomination Justification

(2025 FL) See previous comments.;(2025 FL) Nematode pressure (sting and root knot) is very high in strawberry fields in FL and they are very difficult to manage without fumigants, e.g. in organic fields. To ensure organic strawberries have a future in Florida, better nematode management programs are absolutely essential. Previous experiments have shown that an in-crop management approach is not enough. Any effective non-fumigant approach will have to be an integrated program, including pre-plant practices, cover crops and in-season program of different products.;

PCR Reason For Need

There is an increasing demand for organic strawberries from Florida, which produces almost all winter strawberries in the US. One of the greatest obstacles for organic strawberry production in Florida are nematodes, esp. sting (and root knot) nematodes. We have tested many different OMRI approved nematicides, but a product-based approach is not sufficient and other tactics such as summer cover cropping, pre-plant soil amendments/treatments, cultivar choice and transplant treatments may have to be included to be more successful. Therefore, this proposal would not just involve in-crop product evaluations but will require both in and off-season practices. We would not so much be comparing products but rather programs (which could include products).

This PCR is for testing an integrated program to manage sting nematodes. It will include the following treatments: 1) May-June: summer cover crop with sunn hemp vs no cover crop, 2) August-September: terminate cover crop & prepare strawberry beds, 3) Septembe -October: transplant steam treatment (to sanitize) for two cultivars (vs no steaming), 4) October-March: post-plant nematicide drip application programs starting 2 weeks after planting when overhead irrigation is turned off with A) Chitin/chitosan-based products, B) Bacillus-based products (B. amyloliquefaciens and others), C) Fungus-based products (Purpureocillium lilicanum) and (D) fermentation and plant-based products (Burkholderia extract, essential oils, plant extracts).07/24/ds

PCR Detail Comments

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00502	A	STRAWBERRY (FIELD & GH) (13-07G=LOW GROWING BERRY SUBGROUP)	Neopestalotiopsis	Resis	Cato,Aaron (AR) ; Adhikari,Tika (NC) ; Hayter,Jensen (TN)	Actinovate AG; Manzate Pro-Stick; Serenade ASO; Switch; RootShield Plus WP; Thiram SC; Aviv; Double Nickel WDG; Double Nickel 55 LC

NorthEast Region	A	NorthCentral Region	A	Southern Region	A	Western Region

Nomination Justification (2025 MD) also a need in NER;(2025 FL) See requestor comments.;(2025 MI) See Prev;

PCR Reason For Need REASON FOR NEED: The North Carolina strawberry industry faced one of its most devastating economic crises this past fall in 2024, likely the worst since the anthracnose outbreaks that devastated the NC strawberry nursery industry in the mid-1980s. The new invasive fungal pathogen, Neopestalotiopsis spp. (known as Neo-P), affects the fruit, leaves, crown, and roots of strawberry plants. Neopestalotiopsis in strawberry is still not very well understood. No effective control measures are available at present. It is compelling to explore IPM tools to manage this disease in strawberries. [NC] 05/25/ds

PCR Detail PROPOSED APPROACH: This new disease is difficult to control, highlighting the need for an integrated disease management approach for the strawberry nursery and production industries. This approach should combine chemical controls and host plant resistance. Some producers may try to grow plants from infested tips during the nursery phase. While some plants may look healthy, producers must cull any unhealthy plants received from suspected nurseries, especially those known to have Neo-Pestalotiopsis infections. Although this may seem wasteful, the levels of Neopestalotiopsis inoculum are linked to future disease levels; thus, removing unhealthy plants before planting is essential for a successful crop. The first strategy is to plant healthy plugs and use fungicides or biopesticides to reduce disease spread. Some strawberry varieties like 'Florida Beauty' and 'Florida Brilliance' are highly susceptible to Neo-P, while 'Sensation' and 'Festival' show moderate resistance. There is limited information about their susceptibility in North Carolina, and Neopestalotiopsis sp. in North Carolina represents a new challenge, therefore it is suggested to conduct greenhouse trials to compare fungicides and biopesticides and the susceptibility of different strawberry cultivars to Neopestalotiopsis sp. Assessing available cultivars and emerging lines will enable to recommend options with resistance or tolerance to NeoP as part of growers' integrated disease management program. This approach can reduce risks and support successful crops while informing breeding programs and private companies about resistance levels in their cultivars. Cultivars Florida Brilliance, Florida Sensation, Camino Real, and Florida Radiance from Florida, as well as Rocco and Liz from NC, are proposed for evaluation in the greenhouse and field. [NC] 05/25/ds

Comments Tennessee growers saw significant loss to NeoP in the 2024 season. Many indicated that the current fungicide recommendations are only moderately effective [TN: 7/25 AA]. NeoP is the primary threat to AR field and plug strawberry producers. Inoculum is introduced to nurseries and field operations and there are no effective management plans for control [AR: 8/25 AA].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00515	A	STRAWBERRY (13-07G=LOW GROWING BERRY SUBGROUP)	Anthracnose (Colletrotrichum spp.)	PPWS	Cato,Aaron (AR) ; Kodati,Srikanth (CT)	Pristine; Tesaris; Adavelt

NorthEast Region		NorthCentral Region	Southern Region		Western Region
	A			A	

Nomination Justification (2025 MD) see requestor comments;(2025 FL) See requestor comments.;

PCR Reason For Need During the summer seasons of 2023 and 2024, strawberry fields across multiple locations in the state experienced widespread symptoms of severe wilting and crown rot. Subsequent diagnostic assessments confirmed that it was anthracnose crown rot. Given the extent of the damage and the lack of effective control strategies, there is an urgent need to develop management options to mitigate the impact of this disease on strawberry production. [CT: 7/25 DS]

PCR Detail An integrated disease management approach would be ideal that include usage of mulches, resistant cultivars, and combination of fungicides from group 11 and group 7. Proposed products: 1) Pristine (Pyraclostrobin): Use as registered control following label directions and 2) Tesaris (Fluxapyroxad): Conduct broadcast applications at 9.1 fl. oz/A, 14-21 day interval and 0-day PHI (Different product rate suggested by IR4). Tesaris is registered for strawberry but the target pest is not on the label. Using muches would reduce the spread of the disease. [CT: 7/25 DS]

Comments HQ suggests to also consider the following product: Adavelt (Florylpicoxamid) [NC: 7/25 DS]. Anthracnose crown rot is a great concern for Arkansas Strawberries in some years, including 2024/2025. Currently strategies such as dips foliar sprays are used. These are not effective and may stunt plants. More products are needing for both strawberry plug and field production [AR: 8/25 AA].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00511	A	PECAN (14-12=TREE NUT GROUP)	Pecan Downy Spot	Resis	Jo,Young-Ki (TX)	Absolute 500 SC; Miravis; Regev; Tesaris; Velum Prime; Abound 2.08F; Aframe; Sovran 50WG; Cevya; Quash 50WG; Stratego 1.04F; Headline 2.09F; Adament 50WG; Ziram 76DF; Elisys; Revylok

NorthEast Region	NorthCentral Region	Southern Region	A	Western Region

Nomination Justification (2025 FL) See requestor comments.;

PCR Reason For Need REASON FOR NEED: The need for a fungicide study for pecan downy spot disease due to the recent increasing prevalence of this pathogen, Mycosphaerella caryigena, and severe outbreaks have been observed in Texas pecan orchards. Despite the extensive use of fungicides for pecan disease management, there has been little information on the efficacy of the newer chemicals against downy spot. Recent observations suggest that downy spot may already have developed insensitivity to commonly used fungicides, necessitating an Integrated Solution approach to determine the most effective fungicide program. Our fungicide field trials will help pecan orchard managers effectively control downy spot and add new labels to current available fungicides. [TX: 06/25 DS]

PCR Detail PROPOSED APPROACH: Demethylation inhibitors (DMI) and organotins, which are common fungicides used for Texas pecan orchards, have shown a significant decline in effectiveness in downy spot. We would like to evaluate new succinate dehydrogenase inhibitor (SDHI) fungicides for controlling downy spot disease. Our field trials conducted in Texas pecan orchards will test SDHI active ingredients, such as fluopyram, fluxapyroxad, and pydiflumetofen, for downy spot disease. The success of SDHI fungicides would improve the current management and update the fungicide labels for the downy spot pathogen which has not yet developed resistance to these chemicals.

PROPOSED PRODUCTS: 1) Velum prime (Fluopyram); registered for the control of diseases other than downy spot in pecan; 4 fl. oz/A in 120 GPA spray volume; use agricultural sprayer guns for applications; begin application at bud break and continue until shell hardening; minimum of 30-day interval, 2) Tesaris (Fluxapyroxad); registered for the control of diseases other than downy spot in pecan; 4 fl. oz/A in 120 GPA spray volume; use agricultural sprayer guns for applications; begin application at bud break and continue until shell hardening; minimum of 30-day interval, 3) Miravis (Pydiflumetofen); not registered on pecan; 4 fl. oz/A in 120 GPA spray volume; use agricultural sprayer guns for applications; begin application at bud break and continue until shell hardening; minimum of 30-day interval [TX: 06/25 DS]
These products are registered on pecan but they are not labeled for the control of downy spot: Abound 2.08F or Aframe (azoxystrobyn), Regev (Difenoconazole + Tea Tree Oil), Sovran 50WG (Kresoxim-methyl), Cevya (mefentrifluconazole), Quash50 WG (metconazole), Stratego 1.04F (Propiconazole + Trifloxystrobin), Headline 2.09F (Pyraclostrobin), Absolute 500 SC or Adament 50WG (Tebuconazole + Trifloxystrobin), Ziram 76 DF (Zinc Dimethyldithiocaramate), Elisys or Revylok (Mefentrifluconazole + Fluxapyroxad) [TX: 6/25 DS].

Comments

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00523	A	CORN (SWEET) (15-22D=CORN (SWEET) SUBGROUP)	Fusarium root rot (Fusarium oxysporum)	PPWS	Solanki,Shyam (SD) ; Higgins,Doug (VA)	TerraMG (A & B); MycoV-43TM Pro-Leaf; TS601 (Methylorubrum populi strain NLS0089); BiotrinsicX19; YSY

NorthEast Region	NorthCentral Region		Southern Region		Western Region
		A		A	

Nomination Justification (2025 FL) See requestor comments.;(2025 MI) See Prev;

PCR Reason For Need Sweet corn is a small-scale, yet high-value specialty crop. Its nationwide farm-gate value is ~ $890 million. In South Dakota, nearly 100 farms grow sweet corn, mostly on specialty crop and organic operations. However, producers face several challenges that include but are not limited to nitrogen (N) deficiency, availability of appropriate cultivars, and seedling diseases (Fusarium root rot) that hinder yield and profitability. Unlike large-scale commodity corn, sweet corn has not benefited from extensive cultivar optimization, the effect of native soil rhizosphere microbiome on nutrient availability, advanced field monitoring using precision ag tools, and product testing, including bio-stimulants and their efficacy [SD: 7/25 DS].

PCR Detail To address these challenges, we aim to integrate research on microbial bioproducts, assess the role of native soil microbiomes in supporting sweet corn development and nitrogen availability, and evaluate early-season diseases such as Fusarium root rot, which impacts stand establishment. Our integrated approach will help identify and promote drought-tolerant, disease-resistant, and nitrogen-efficient sweet corn varieties tailored for South Dakota and other U.S. production regions. Specific resolution includes: 1. Identification of genotype-soil microbial interactions that influence the root-microbial nutrient acquisition in selected sweet corn varieties. 2. Testing of Bio-stimulants that reduce the fertilizer application use and and suitable for organic cultivation. 3. Monitoring sweet corn health, stress, and yield using high-throughput precision agriculture-enabled plant phenotyping. The requester is suggesting to test Pivot Bio Proven 40 (Microbial nitrogen): This product is like a microbial nitrogen fertilizer. It may help reduce Fusarium incidence, as plants become healthier using the fertilizer. [SD: 7/25 DS].

Comments Requester agrees to incorporate the testing of any of the following fungicides in the study: 1) Mycov-43 Proleaf, 2) TerraMG, 3) IntrinsicX19, 4) YSY, 4) TS601 [NC: 7/25 DS]. Stand establishment issues with supersweet type varieties, seed treatment options needed. Difference in variety tolerance present but not well characterized [VA: 8/25 AA].

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00505	A	AVOCADO (24B=TROPICAL AND SUBTROPICAL, MEDIUM TO LARGE FRUIT, SMOOTH, INEDIBLE PEEL SUBGROUP)	Avocado Branch Canker	PPWS	Spann,Tim (CA)	Pristine; Quadris Ridomil Gold SL Co-Pack; Switch; Tilt; Quash

NorthEast Region	NorthCentral Region	Southern Region	Western Region	A

Nomination Justification (2025 CA) same;

PCR Reason For Need REASON FOR NEED: Avocado branch canker (ABC) is a fungal disease of avocados that occurs on twigs and branches. Previously, this disease was commonly referred to as Dothiorella branch canker. However, recent research has revealed that the causal agent is several different species of fungi all from the Botryosphaeriaceae family. Thus, the current common name of Botryosphaeria branch canker, or simply avocado branch canker. Twenty-one avocado groves in the major producing regions of California were surveyed in 2018 and 2019. Monthly inoculations of wounded, green, and lignified branches of 'Hass' and 'Lamb Hass' were conducted. Botryosphaeriaceae were the predominant fungi recovered from cankered tissues collected across the surveyed traditional and high-density orchards and caused symptoms on all six sampled cultivars. A total of 15 Botryosphaeriaceae species were isolated from avocado tissue, including Botryospharia dothidea, five species of Diplodia, Dothiorella plurivora, Lasiodiplodia theobromae, L. citricola, and six species of Neofusicoccum. These fungi were also recovered in asymptomatic twigs and other organs and thus exist as a potential reservoir for future infections. In their 2022 publication, Avenot et al. summarized the avocado branch canker issue: "In the long term, Botryosphaeriaceae prevalence in avocado orchards could become problematic for the avocado industry, considering the absence of registered fungicides for treating pruning wounds and the difficulty of controlling these fungi once inside the plant." Effective control measures for this disease are urgently needed for avocado nurseries and in commercial orchards [CA: 5/25/DS].

PCR Detail PROPOSED APPROACH: Twizeyimana et al. (2013) conducted in vitro screenings of 12 fungicides for efficacy against avocado branch canker related pathogens. However, only preliminary field trials and no nursery trials were conducted to determine the in situ effectiveness of these fungicides in controlling avocado branch canker. Thus, a comprehensive field and nursery study is needed to evaluate previously screened fungicides, as well as any new chemistries that have been brought to market since 2013, to determine if any of these products are effective and should be advanced to registration. [CA: 5/25/DS].

Comments Use pattern details for the proposed products can be found in the original copy of the PCR [5/25/DS]

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00057	A	BASIL (25AB=HERB FRESH AND DRIED LEAVES SUBGROUP)	Downy Mildew (All species)	PPWS	Gu,Mengmeng (TX) ; Zhang,Shouan (FL) ; McGrath,Margaret (NY) ; Quesada-Ocampo,Lina Maria (NC) ; Heck,Daniel (NY)	

NorthEast Region	A	NorthCentral Region	A	Southern Region	A	Western Region

Nomination Justification (2025 MD) see previous comments;(2025 FL) See previous comments.;(2025 MI) See Prev;

PCR Reason For Need Several registrations for conventional and biopesticide/organic products (Ranman, OXTP, Reason, Presidio, Phosphorous Acid, Revus, mefenoxam, azoxystrobin, oxidate, Milstop, Actinovate, Trilogy, Procidic, Regalia) but no highly efficacious biopesticide/organic products available. Me Too Request: 07/21; In basil cultivation, managing downy mildew is challenging. Products have lost efficacy over time, which highlights the pathogen's ability to evolve. Regional fungicide efficacy trials are needed to better understand which products are still effective against basil DM [07/24/NY, 08/24/DS]

PCR Detail Comments

IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00124	A	BASIL (25AB=HERB FRESH AND DRIED LEAVES SUBGROUP)	Downy Mildew (All species)	Orgnc	McGrath,Margaret (NY) ; Deyoung,Alan (IL) ; Scheufele,Susan (MA) ; Heck,Daniel (NY)	Actinovate AG; MilStop; Prophyt; Cueva; Regalia; Basic Copper 53; Nu-Cop HB; Badge X2; MycoV-43TM Pro-Leaf; Lalstop G46; LalStim Osmo; Timorex Act

NorthEast Region	A	NorthCentral Region	A	Southern Region	Western Region

Nomination Justification (2025 MD) see previous comments;(2025 MI) See Prev;

PCR Reason For Need Me Too request 07/21; New variants of downy mildew have recently supplanted resistant cultivars and pose a new challenge for organic production. Potential biofungicide programs, which include testing new compounds and rotation among plant extracts with commercially available biofungicides, would be extremely beneficial. Combinations/rotation of Lalstop G46 (Clonostachys rosea strain J1446) +Milstop (Potassium bicarbonate), Lalstop G46 (Clonostachys rosea strain J1446)+LalStim Osmo (Glycine betaine), Actinovate (Streptomyces lydicus)+Timorex Act (extract of the tea tree plant), Badge (copper oxychloride +copper hydroxide)+ProPhyt (Potassium phosphite) and MycoV-43 (a natural product extract from an estuarine bacterium). [NY 07/24, DS 08/24]

PCR Detail Comments

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IS Number	Priority	COMMODITY (CROP GROUP)	Pest	Problem	Requstor Name	Potential Products
IS00457	A	FIELD PENNYCRESS (OIL SEED) (99=MISC GROUP)	White Mold (All species of Sclerotinia)	PPWS	Solanki,Shyam (SD)	Genetic Mutants

NorthEast Region	NorthCentral Region	Southern Region	Western Region
	A		

Nomination Justification (2025 MI) See Prev;

PCR Reason For Need Reason for need: Pennycress is a potential winter annual cover and oilseed bioenergy crop. However, its high susceptibility to white mold is a concern for its cropping system integration. Transgenic lines are being developed for resistance testing [SD: 8/23]

PCR Detail Comments

Total A Nomination 43