

BIOLOGICALS

by

FMC

Inoculant Seed Treatment Compatibility Guide

Inoculant Seed Treatment Compatibility Guide

Compatibility tests are conducted by Novonesis with registered seed treatments to ensure the viability of these inoculants is not compromised by pesticides and other seed treatments.

Each inoculant formulation is tested with various seed treatments, using different application methods on specific crops. The planting windows presented are specific to the inoculants BioniQ®, Cell-Tech®, JumpStart®, TagTeam®, Optimize® LV and QuickRoots® only and should not be used for other inoculants.

Compatibility tests are ongoing. For the most up-to-date seed treatment compatibility, please contact your local Biologicals by FMC representative. Updated: October 2024.

BioniQ® Cell-Tech® JumpStart®
Optimize® LV QuickRoots®
TagTeam® TagTeam® BioniQ®

Barley & Oats Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
BioniQ® wettable powder inoculant – barley and oats			
Cruiser® Vibrance® Quattro	60 days	60 days	60 days
Dividend Extreme®	30 days	30 days	Not Recommended
EverGol® Energy	60 days	60 days	60 days
Insure® Cereal FX4	60 days	60 days	60 days
NipsIT™ SUITE	10 days	10 days	Not Recommended
Rancona® Trio	60 days	60 days	30 days
Raxil® Pro MD	60 days	60 days	30 days
Raxil® Pro Shield	60 days	60 days	30 days
Terraxa™ F4	60 days	60 days	Not Recommended
Vibrance® Quattro	60 days	60 days	60 days
Vibrance® Quattro + Cruiser® 5FS	60 days	60 days	60 days
Vitaflo® 280	Not Recommended	Not Recommended	Not Recommended

When applying BioniQ® alone, use the following water volumes per box to achieve uniform distribution and to ensure viability of BioniQ®:

Crop	Barley	Canola/Mustard	Oats	Rye	Wheat
Water (Litres)	34	5	24	39	42

When mixing BioniQ® into a seed treatment slurry, reduce the amount of water listed in the above table by the volume of seed treatment. Consult the seed treatment manufacturers label for proper rates of seed treatments.

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

Canola Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
BioniQ® wettable powder inoculant – canola			
Helix® Saltro®	60 days	•	•
Helix® Saltro® + Buteo™	60 days	•	•
Helix® Saltro® + Fortenza® Advanced	60 days	•	•
Helix® Vibrance®	60 days	•	•
Helix® Vibrance® + Buteo™	60 days	•	•
Helix® Vibrance® + Fortenza®	60 days	•	•
Helix® Vibrance® + Lumiderm™	60 days	•	•
Helix® Vibrance® + Buteo™ + Lumiposa™	60 days	•	•
LumiGEN®	60 days	•	•
Prosper® EverGol®	60 days	•	•
Prosper® EverGol® + Buteo™	30 days	•	•
Prosper® EverGol® + Fortenza®	60 days	•	•
Prosper® EverGol® + Lumiderm™	60 days	•	•
Visivio™	60 days	•	•
Visivio™ + Buteo™	30 days	•	•
Visivio™ + Fortenza®	60 days	•	•
Visivio™ + Lumiderm™	60 days	•	•
JumpStart® wettable powder inoculant – canola and mustard			
Acceleron® Seed Applied Solutions for canola *	30 days	•	•
Helix® Vibrance®	30 days	•	•
Helix® Vibrance® + Fortenza®	30 days	•	•
Prosper® EverGol®	30 days	•	•

JumpStart® Bare Seed Planting Window

Crop	Planting Window
Canola and mustard	60 Days

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

*Acceleron® Seed Applied Solutions for canola contains the active ingredients difenoconazole, metalaxyl (M and S isomers), fludioxonil and thiamethoxam.

Chickpea Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
JumpStart® wettable powder inoculant – chickpea			
Trilex® AL	15 days	15 days	•
TagTeam® peat inoculant - chickpea			
Allegiance® FL (kabuli)	6 hours	6 hours	•
Allegiance® FL/Crown®	4 hours	4 hours	•
Apron® Advance	6 hours	6 hours	•
Crown®	6 hours	6 hours	•
Cruiser 5FS + Vibrance® Maxx	6 hours	6 hours	•
EverGol® Energy	•	6 hours	•
Insure® Pulse	6 hours	6 hours	6 hours
Intego™ Solo	6 hours	6 hours	Not Recommended
Intego™ Solo + Cruiser 5FS + Vibrance® Maxx	6 hours	6 hours	Not Recommended
Rancona® Trio	6 hours	6 hours	•
Stress Shield® 480 (desi)	6 hours	6 hours	•
Trilex® AL	4 hours	4 hours	•
Vibrance® Total	6 hours	6 hours	•

Chickpea Bare Seed Planting Window

Inoculant	Planting Window
JumpStart®	15 days
TagTeam® peat	6 hours

Corn Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
QuickRoots® dry planter box inoculant – corn			
Accelaron® Seed Applied Solutions for corn (fungicides and insecticide) *	•	540 days	•
Accelaron® Seed Applied Solutions for corn (fungicides and insecticide) * + Poncho® 1250 ² /VOTiVO®		540 days	
Accelaron® Seed Applied Solutions for corn (fungicide) * + Lumivia™	•	540 days	•

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

²1.25 mg per seed.

Lentil Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
Cell-Tech® peat inoculant – lentil			
Allegiance® FL	48 hours	24 hours	•
Crown®	24 hours	Not Recommended	•
Cruiser 5FS + Vibrance® Maxx	48 hours	48 hours	•
EverGol® Energy	24 hours	24 hours	•
EverGol® Energy + Stress Shield® 600	6 hours	6 hours	•
Insure® Pulse	Not Recommended	Not Recommended	Not Recommended
Intego™ Solo	48 hours	48 hours	•
Intego™ Solo + Cruiser 5FS + Vibrance® Maxx	48 hours	48 hours	•
Lumivia™ CPL	48 hours	48 hours	•
Rancona® Trio	6 hours	2 hours	•
Stress Shield® 600 + Pro-lzed® Blue Colorant (104 ml + 20 ml rate)	•	24 hours	Not Recommended
Trilex® AL	24 hours	6 hours	•
Trilex® EverGol®	48 hours	48 hours	48 hours
Trilex® EverGol® Shield (104 ml rate)	48 hours	48 hours	Not Recommended
Vibrance® Maxx	48 hours	48 hours	Not Recommended
Vibrance® Maxx RFC	48 hours	48 hours	•
Vibrance® Total	48 hours	48 hours	•
Zeltera™ Pulse	48 hours	48 hours	•

Bare Seed Planting Window

Inoculant	Planting Window
Cell-Tech® peat	48 hours

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

Lentil Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
JumpStart® wettable powder inoculant – lentil			
Insure® Pulse	Not Recommended	Not Recommended	Not Recommended
Lumivia™ CPL	30 days	30 days	30 days
Lumivia™ CPL + Rancona® Trio	30 days	30 days	•
Lumivia™ CPL + Trilex® EverGol®	30 days	30 days	•
Rancona® Trio	30 days	30 days	7 days
Trilex® AL	15 days	15 days	•
Trilex® EverGol®	15 days	15 days	15 days
Trilex® EverGol® + Stress Shield® 600 (208ml/100 kg)	15 days	15 days	Not Recommended
Zeltera™ Pulse	30 days	30 days	Not Recommended
QuickRoots® wettable powder inoculant – lentil			
Cruiser 5FS + Vibrance® Maxx	140 days	140 days	140 days
EverGol® Energy	120 days	120 days	•
EverGol® Energy + Stress Shield® 600	120 days	120 days	•
Insure® Pulses	Not Recommended	Not Recommended	Not Recommended
Lumivia™ CPL	30 days	30 days	30 days
Lumivia™ CPL + Rancona® Trio	30 days	30 days	•
Lumivia™ CPL + Trilex® EverGol®	30 days	30 days	•
Trilex® EverGol®	160 days	160 days	160 days
Trilex® EverGol® + Stress Shield® 600	120 days	120 days	15 days

Bare Seed Planting Window

Inoculant	Planting Window
JumpStart®	15 Days

When JumpStart® is mixed with a rhizobia inoculant, the planting window is determined by the inoculant with the lowest planting window.

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

Lentil Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
TagTeam® Cell-Tech® liquid inoculants – lentil			
Cruiser 5FS + Vibrance® Maxx	48 hours	48 hours	Not Recommended
EverGol® Energy	•	6 hours	•
EverGol® Energy + Stress Shield®	•	Not Recommended	•
Insure® Pulse	Not Recommended	Not Recommended	Not Recommended
Intego™ Solo	Not Recommended	Not Recommended	Not Recommended
Intego™ Solo + Cruiser 5FS + Vibrance® Maxx	Not Recommended	Not Recommended	Not Recommended
Lumivia™ CPL	48 hours	48 hours	24 hours
Lumivia™ CPL + Trilex® EverGol®	24 hours	24 hours	•
Rancona® Trio	Not Recommended	Not Recommended	Not Recommended
Stress Shield® 600 + Pro-Ized® Blue Colorant (104 ml + 20 ml rate)	•	24 hours	Not Recommended
Trilex® EverGol®	Not Recommended	Not Recommended	Not Recommended
Trilex® EverGol® Shield (104 ml rate)	Not Recommended	Not Recommended	Not Recommended
Vibrance® Maxx	24 hours	24 hours	Not Recommended
Vibrance® Maxx RFC	48 hours	48 hours	•
Vibrance® Total	48 hours	48 hours	•
Zeltera™ Pulse	Not Recommended	Not Recommended	•

Bare Seed Planting Window

Inoculant	Planting Window
TagTeam® / Cell-Tech® liquid	48 hours

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed

Lentil Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
TagTeam® peat inoculant – lentil			
Allegiance® FL	48 hours	24 hours	•
Crown®	24 hours	Not Recommended	•
Cruiser 5FS + Vibrance® Maxx	48 hours	48 hours	•
EverGol® Energy	24 hours	24 hours	•
EverGol® Energy + Stress Shield® 600	6 hours	6 hours	•
Insure® Pulse	Not Recommended	Not Recommended	Not Recommended
Intego™ Solo	48 hours	48 hours	Not Recommended
Intego™ Solo + Cruiser 5FS + Vibrance® Maxx	48 hours	48 hours	Not Recommended
Intego™ Solo + Trilex® EverGol®	48 hours	48 hours	•
Lumivia™ CPL	48 hours	48 hours	•
Lumivia™ CPL + Trilex® EverGol®	24 hours	24 hours	•
Rancona® Trio	6 hours	2 hours	•
Trilex® AL	24 hours	6 hours	•
Trilex® EverGol®	48 hours	48 hours	48 hours
Trilex® EverGol® Shield (104 ml rate)	48 hours	48 hours	Not Recommended
Vibrance® Maxx	48 hours	48 hours	Not Recommended
Vibrance® Maxx RFC	48 hours	48 hours	•
Vibrance® Total	48 hours	48 hours	•
Zeltera™ Pulse	48 hours	48 hours	•

Bare Seed Planting Window

Inoculant	Planting Window
TagTeam® peat	48 hours

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

Pea Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
Cell-Tech® peat inoculant – pea			
Allegiance® FL	24 hours	12 hours	•
Apron Maxx® Peas	48 hours	24 hours	24 hours
Cruiser 5FS + Vibrance® Maxx	48 hours	48 hours	•
EverGol® Energy	24 hours	24 hours	•
EverGol® Energy + Stress Shield® 600	24 hours	24 hours	•
Insure® Pulse	Not Recommended	Not Recommended	Not Recommended
Intego™ Solo + Apron Maxx® Peas	48 hours	48 hours	•
Intego™ Solo + Cruiser 5FS + Vibrance® Maxx	48 hours	48 hours	•
Lumivia™ CPL	48 hours	48 hours	•
Rancona® Trio	6 hours	2 hours	•
Stress Shield® 600 + Pro-Ized® Blue Colorant (high rate)	•	6 hours	Not Recommended
Trilex® AL	30 hours	24 hours	Not Recommended
Trilex® EverGol®	48 hours	48 hours	48 hours
Trilex® EverGol® Shield (104 ml rate)	24 hours	24 hours	Not Recommended
Vibrance® Maxx	48 hours	48 hours	48 hours
Vibrance® Maxx RFC	48 hours	48 hours	•
Vibrance® Total	48 hours	48 hours	•
Zeltera™ Pulse	48 hours	48 hours	•

Bare Seed Planting Window

Inoculant	Planting Window
Cell-Tech® peat	48 hours

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

Pea Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
JumpStart® wettable powder inoculant – pea			
Allegiance® FL	15 days	15 days	•
Apron Maxx® Peas	15 days	15 days	•
Insure® Pulse	Not Recommended	Not Recommended	Not Recommended
Lumivia™ CPL	30 days	30 days	30 days
Lumivia™ CPL + Rancona® Trio	30 days	30 days	•
Lumivia™ CPL + Trilex® EverGol®	30 days	30 days	•
Rancona® Trio	30 days	30 days	7 days
Trilex® AL	2 days	2 days	•
Trilex® EverGol®	15 days	15 days	15 days
Trilex® EverGol® + Stress Shield® 600 (208 ml/100 kg)	15 days	15 days	Not Recommended
Zeltera™ Pulse	30 days	30 days	Not Recommended
QuickRoots® wettable powder inoculant – pea			
Cruiser 5FS + Vibrance® Maxx	140 days	140 days	140 days
EverGol® Energy	120 days	120 days	•
EverGol® Energy + Stress Shield® 600	120 days	120 days	•
Insure® Pulses	Not Recommended	Not Recommended	Not Recommended
Lumivia™ CPL	30 days	30 days	30 days
Lumivia™ CPL + Rancona® Trio	30 days	30 days	•
Lumivia™ CPL + Trilex® EverGol®	30 days	30 days	•
Trilex® EverGol®	160 days	160 days	160 days
Trilex® EverGol® + Allegiance®	160 days	160 days	160 days
Trilex® EverGol® + Stress Shield® 600	120 days	120 days	15 days

Bare Seed Planting Window

Inoculant	Planting Window
JumpStart®	15 days

When JumpStart® is mixed with a rhizobia inoculant, the planting window is determined by the inoculant with the lowest planting window.

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

Pea Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
TagTeam[®] and Cell-Tech[®] liquid inoculant – pea			
Allegiance [®] FL	Not Recommended	Not Recommended	Not Recommended
Cruiser 5FS + Vibrance [®] Maxx	48 hours	48 hours	Not Recommended
EverGol [®] Energy	•	6 hours	•
EverGol [®] Energy + Stress Shield [®]	•	Not Recommended	•
Insure [®] Pulse	Not Recommended	Not Recommended	Not Recommended
Intego [™] Solo + Apron Maxx [®] Peas	Not Recommended	Not Recommended	Not Recommended
Intego [™] Solo + Cruiser 5FS + Vibrance [®] Maxx	Not Recommended	Not Recommended	Not Recommended
Lumivia [™] CPL	48 hours	48 hours	24 hours
Lumivia [™] CPL + Trilex [®] EverGol [®]	24 hours	24 hours	•
Rancona [®] Trio	Not Recommended	Not Recommended	Not Recommended
Stress Shield [®] 600 + Pro-Ized [®] Blue Colorant (high rate)	•	6 hours	Not Recommended
Trilex [®] EverGol [®]	Not Recommended	Not Recommended	Not Recommended
Trilex [®] EverGol [®] Shield (104 ml rate)	Not Recommended	Not Recommended	Not Recommended
Vibrance [®] Maxx	48 hours	48 hours	Not Recommended
Vibrance [®] Maxx RFC	48 hours	48 hours	•
Vibrance [®] Total	48 hours	48 hours	•
Zeltera [™] Pulse	Not Recommended	Not Recommended	•

Bare Seed Planting Window

Inoculant	Planting Window
TagTeam [®] / Cell-Tech [®] liquid	48 hours

• Indicates not tested

¹QuickRoots[®] inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

Pea Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
TagTeam® peat inoculant – pea			
Allegiance® FL	24 hours	24 hours	6 hours
Cruiser 5FS + Vibrance® Maxx	48 hours	48 hours	•
EverGol® Energy	24 hours	24 hours	•
EverGol® Energy + Stress Shield® 600	24 hours	24 hours	•
Insure® Pulse	Not Recommended	Not Recommended	Not Recommended
Intego™ Solo + Apron Maxxv Peas	48 hours	48 hours	48 hours
Intego™ Solo + Cruiser 5FS + Vibrance® Maxx	48 hours	48 hours	48 hours
Intego™ Solo + Trilex® EverGol®	48 hours	48 hours	48 hours
Lumivia™ CPL	48 hours	48 hours	•
Lumivia™ CPL + Trilex® EverGol®	24 hours	24 hours	•
Rancona® Trio	6 hours	2 hours	•
Trilex® AL	30 hours	24 hours	Not Recommended
Trilex® EverGol®	48 hours	48 hours	48 hours
Trilex® EverGol® Shield (104 ml rate)	24 hours	24 hours	Not Recommended
Vibrance® Maxx	48 hours	48 hours	48 hours
Vibrance® Maxx RFC	48 hours	48 hours	•
Vibrance® Total	48 hours	48 hours	•
Zeltera™ Pulse	48 hours	8 hours	•

Bare Seed Planting Window

Inoculant	Planting Window
TagTeam® peat	48 hours

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

Soybean Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
Cell-Tech® peat inoculant – soybean			
Cruiser Maxx® Vibrance® Beans	2 days	2 days	•
EverGol® Energy	2 days	2 days	•
EverGol® Energy + Stress Shield® 600	2 days	2 days	•
Fortenza® + Vayantis® IV	No Data	No Data	No Data
Lumiderm®	2 days	2 days	•
Lumisena™	2 days	2 days	•
Rancona® Trio	24 hours	24 hours	•
Stress Shield® 600	2 days	2 days	•
Trilex® EverGol®	2 days	2 days	•
Vayantis® IV	No Data	No Data	No Data
Vayantis® IV + Cruiser 5FS	No Data	No Data	No Data
Vayantis® IV RFC	No Data	No Data	No Data
Vibrance® Maxx RFC	2 days	2 days	•
Vibrance® Maxx RFC + Cruiser® 50g	2 days	2 days	•
Cell-Tech® liquid inoculant – soybean			
Acceleron® Seed Applied Solutions STANDARD*	4 days	4 days	•
Cruiser Maxx® Vibrance® Beans	4 days	4 days	•
EverGol® Energy ²	4 days	4 days	•
EverGol® Energy ² + Stress Shield® (104 ml low rate)	4 days	4 days	•
Fortenza® + Vayantis® IV	4 days	4 days	•
ILeVO®	4 days	4 days	•
Intego™ Solo	4 days	4 days	•
Lumiderm®	4 days	4 days	•
Lumisena™	4 days	4 days	•
Rancona® Trio	24 hours	24 hours	•
Trilex® AL	4 days	4 days	•
Trilex® EverGol®	4 days	4 days	•
Vayantis® IV	4 days	4 days	•
Vayantis® IV + Cruiser 5FS	4 days	4 days	•
Vayantis® IV RFC	4 days	4 days	•
Vibrance® Maxx RFC	4 days	4 days	•

Bare Seed Planting Window

Inoculant	Planting Window
Cell-Tech® peat	2 days
Cell-Tech® liquid	4 days

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

²Tested with colourant and without PSF 1010.

* Acceleron® Seed Applied Solutions STANDARD for soybeans (fungicides and insecticide) is a combination of four separate individually registered products, which together contain the active ingredients Penflufen, Prothioconazole, Metalaxyl, flupyradifurone, and tetraniliprole (East) or Penflufen, Prothioconazole, Metalaxyl and imidacloprid (West).

Soybean Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
JumpStart® wettable powder inoculant – soybean			
Cruiser Maxx® Vibrance® Beans	30 days	30 days	30 days
EverGol® Energy ²	30 days	30 days	30 days
EverGol® Energy ² with Stress Shield® 600 (104 ml rate)	30 days	30 days	Not Recommended
Insure® Pulse	•	30 days	•
Trilex® AL	7 days	7 days	•

Bare Seed Planting Window

Inoculant	Planting Window
JumpStart®	30 days

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

²Tested with colourant and without PSF 1010.

Soybean Planting Window

Seed Treatment	Sequential Application	Simultaneous Application
Optimize® LV liquid inoculant – soybean		
Acceleron® Seed Applied Solutions BASIC*	120 days	120 days
Acceleron® Seed Applied Solutions STANDARD*	120 days	120 days
Acceleron® Seed Applied Solutions STANDARD* + ILeVO®	120 days	120 days
Acceleron® Seed Applied Solutions STANDARD* + Saltro®	120 days	120 days
Apron XL® + Fortenza® Vibrance® Maxx	•	120 days
Cruiser Maxx® Vibrance® Beans	120 days	120 days
Cruiser Maxx® Vibrance® Beans + Apron XL® + Saltro®	120 days	120 days
Cruiser Maxx® Vibrance® Beans + Apron XL® + Vayantis®	120 days	120 days
Draco™	•	120 days
Draco™ + Cruiser® 5FS + Vibrance® Trio + Vayantis® + Saltro®	•	120 days
Draco™ + Fortenza® + Vibrance® Trio + Vayantis® + Saltro®	•	120 days
EverGol® Energy ²	120 days	120 days
EverGol® Energy ² + ILeVO®	120 days	90 days
EverGol® Energy ² + Stress Shield® 600 (104 ml low rate)	120 days	120 days
Fortenza®	•	120 days
Fortenza® + Acceleron® Seed Applied Solutions BASIC*	•	120 days
Fortenza® + Saltro® + Vayantis® IV	120 days	120 days
Fortenza® + Vayantis® IV	•	120 days
Fortenza® + Vibrance® Maxx RFC	•	120 days
Fortenza® + Vibrance® Maxx RFC + Apron XL®	120 days	120 days
Fortenza® + Vibrance® Maxx RFC + Apron XL® + Saltro®	120 days	120 days
Fortenza® + Vibrance® Maxx RFC + Apron XL® + Vayantis®	120 days	120 days
Fortenza® + Vibrance® Maxx RFC + Apron XL® + Vayantis® + Saltro®	120 days	120 days
ILeVO®	60 days	60 days
Insure® Pulse	•	30 days
Integral®	90 days	90 days
Lumiderm®	120 days	120 days
Lumisena™	120 days	120 days
Rancona® Trio	Not Recommended	Not Recommended
Vayantis® IV	120 days	120 days
Vayantis® IV + Cruiser 5FS	120 days	120 days
Vayantis® IV RFC	120 days	120 days
Vibrance® Maxx RFC	120 days	120 days
Vibrance® Maxx RFC + Apron XL® + Vayantis®	•	120 days
Zeltera™ Pulse	Not Recommended	Not Recommended

Bare Seed Planting Window

Inoculant	Planting Window
Optimize® LV liquid	220 days

Seed companies may get planting windows that extend beyond the standard 120-day planting window for Optimize® LV.

• Indicates not tested

²Tested with colourant and without PSF 1010.

*Acceleron® Seed Applied Solutions BASIC for soybeans (fungicides only) is a combination of two separate individually registered products, which together contain the active ingredients Penflufen, Prothioconazole, and Metalaxyl.

Acceleron® Seed Applied Solutions STANDARD for soybeans (fungicides and insecticide) is a combination of four separate individually registered products, which together contain the active ingredients Penflufen, Prothioconazole, Metalaxyl, flupyradifurone, and tetraniliprole (East) or Penflufen, Prothioconazole, Metalaxyl and imidacloprid (West).

Soybean Planting Window

Seed Treatment	Sequential Application	Simultaneous Application
Optimize® LV liquid inoculant with additional liquid additive (extender)¹ – soybean		
Acceleron® Seed Applied Solutions BASIC*	•	220 days
Acceleron® Seed Applied Solutions STANDARD*	220 days	220 days
Acceleron® Seed Applied Solutions STANDARD* + ILeVO®	220 days	220 days
Acceleron® Seed Applied Solutions STANDARD* + Saltro®	220 days	220 days
Apron XL® + Vibrance® Maxx RFC	•	220 days
Apron XL® + Cruiser Maxx® Vibrance Beans	•	220 days
Apron XL® + Fortenza® Vibrance® Maxx	•	220 days
Cruiser Maxx® Vibrance® Beans	•	220 days
Cruiser Maxx® Vibrance Beans + Apron XL® + Saltro®	220 days	220 days
Cruiser Maxx® Vibrance Beans + Apron XL® + Vayantis®	220 days	220 days
Draco™	•	220 days
Draco™ + Cruiser® 5FS + Vibrance® Trio + Vayantis® + Saltro®	•	220 days
Draco™ + Fortenza® + Vibrance® Trio + Vayantis® + Saltro®	•	220 days
EverGol® Energy ²	•	220 days
EverGol® Energy ² + ILeVO®	220 days	220 days
EverGol® Energy ² + Stress Shield® 600 (208 ml high rate)	•	220 days
Fortenza®	•	220 days
Fortenza® + Acceleron® Seed Applied Solutions BASIC*	•	220 days
Fortenza® + Cruiser Maxx® Vibrance Beans	•	220 days
Fortenza® + Saltro® + Vayantis® IV	220 days	220 days
Fortenza® + Vayantis® IV	•	220 days
Fortenza® + Vibrance® Maxx RFC	•	220 days
Fortenza® + Vibrance® Maxx RFC + Apron XL®	220 days	220 days
Fortenza® + Vibrance® Maxx RFC + Apron XL® + Saltro®	220 days	220 days
Fortenza® + Vibrance® Maxx RFC + Apron XL® + Vayantis®	220 days	220 days
Fortenza® + Vibrance® Maxx RFC + Apron XLV + Vayantis® + Saltro®	220 days	220 days
ILeVO®	220 days	220 days
Integral®	•	220 days
Insure® Pulse	•	60 days
Lumiderm®	220 days	220 days
Lumisena™	220 days	220 days
Rancona® Trio	Not Recommended	Not Recommended
Vayantis® IV	220 days	220 days
Vayantis® IV + Cruiser 5FS	220 days	220 days
Vayantis® IV RFC	220 days	220 days
Vibrance® Maxx RFC + Apron XL® + Vayantis®	•	220 days
Zeltera™ Pulse	Not Recommended	Not Recommended

Bare Seed Planting Window

Inoculant	Planting Window
Optimize® LV liquid +additional liquid additive (extender) ³	220 days

• Indicates not tested

² Tested with colourant and without PSF 1010.

³ Additional liquid extender purchased separately.

* Acceleron® Seed Applied Solutions BASIC for soybeans (fungicides only) is a combination of two separate individually registered products, which together contain the active ingredients Penflufen, Prothioconazole, and Metalaxyl. Acceleron® Seed Applied Solutions STANDARD for soybeans (fungicides and insecticide) is a combination of four separate individually registered products, which together contain the active ingredients Penflufen, Prothioconazole, Metalaxyl, flupyradifurone, and tetraniliprole (East) or Penflufen, Prothioconazole, Metalaxyl and imidacloprid (West).

Soybean Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
QuickRoots® wettable powder inoculant – soybean			
Acceleron® Seed Applied Solutions STANDARD*	300 days	300 days	220 days
Allegiance® FL	240 days	•	•
Cruiser Maxx® Vibrance® Beans	300 days	300 days	300 days
Cruiser Maxx® Vibrance® Beans + ILeVO®	300 days	300 days	•
EverGol® Energy ²	300 days	300 days	300 days
EverGol® Energy ² + ILeVO®	300 days	300 days	•
EverGol® Energy ² + Stress Shield® 600 (104 ml)	300 days	300 days	300 days
EverGol® Energy + Stress Shield® 600 (208 ml)	300 days	300 days	300 days
ILeVO®	300 days	300 days	300 days
Integral®	300 days	300 days	•
Lumiderm®	300 days	300 days	•
Lumisena™	300 days	300 days	•
Molybdenum	210 days	•	210 days
Vibrance® Maxx RFC	210 days	210 days	210 days

• Indicates not tested

¹ QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

² Tested with colourant and without PSF 1010.

* Acceleron® Seed Applied Solutions STANDARD for soybeans (fungicides and insecticide) is a combination of four separate individually registered products, which together contain the active ingredients Penflufen, Prothioconazole, Metalaxyl, flupyradifurone, and tetraniliprole (East) or Penflufen, Prothioconazole, Metalaxyl and imidacloprid (West).

Wheat Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
BioniQ® wettable powder inoculant – wheat			
Cruiser® Vibrance® Quattro	60 days	60 days	60 days
Dividend Extreme®	30 days	30 days	Not Recommended
EverGol® Energy	60 days	60 days	60 days
Insure® Cereal FX4	60 days	60 days	60 days
Lumivia™ CPL	60 days	60 days	60 days
NipsIT™ SUITE	10 days	10 days	Not Recommended
Rancona® Trio	60 days	60 days	30 days
Raxil® Pro MD	60 days	60 days	30 days
Raxil® Pro Shield	60 days	60 days	30 days
Straxan™	60 days	60 days	60 days
Terraxa™ F4	60 days	60 days	Not Recommended
Vibrance® Quattro	60 days	60 days	60 days
Vibrance® Quattro + Cruiser® 5FS	60 days	60 days	60 days
Vitaflo® 280	Not Recommended	Not Recommended	Not Recommended

When applying BioniQ® alone, use the following water volumes per box to achieve uniform distribution and to ensure viability of BioniQ®:

Crop	Barley	Canola/Mustard	Oats	Rye	Wheat
Water (Litres)	34	5	24	39	42

When mixing BioniQ® into a seed treatment slurry, reduce the amount of water listed in the above table by the volume of seed treatment. Consult the seed treatment manufacturers label for proper rates of seed treatments.

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

Wheat Planting Window

Seed Treatment	Sequential Application	Simultaneous Application	Tank Mix Application ¹
JumpStart® wettable powder inoculant – wheat			
Cruiser® Vibrance® Quattro	30 days	30 days	30 days
EverGol® Energy ²	30 days	30 days	30 days
Insure® Cereal	30 days	30 days	30 days
NipsIT™ SUITE	30 days	30 days	•
Rancona® Trio	30 days	30 days	30 days
Raxil® Pro	30 days	30 days	30 days
Raxil® Pro Shield (co-pack)	30 days	30 days	30 days
Vibrance® Quattro	30 days	30 days	30 days
QuickRoots® wettable powder inoculant – wheat			
Cruiser® Vibrance® Quattro	•	85 days	85 days
EverGol® Energy	90 days	90 days	90 days
Insure® Cereal	•	85 days	85 days
Insure® Cereal FX4	80 days	80 days	80 days
NipsIT™ SUITE	10 days	10 days	10 days
Rancona® Trio	80 days	80 days	80 days
Raxil® Pro	65 days	65 days	35 days
Raxil® Pro MD	300 days	300 days	300 days

Bare Seed Planting Window

Inoculant	Planting Window
JumpStart®	30 days

• Indicates not tested

¹QuickRoots® inoculant was tank mixed with the seed treatment for two hours before applying to the seed. All other inoculants were tank mixed with the seed treatment for four hours prior to applying to the seed.

²Tested with colourant and without PSF 1010.

Compatibility tests are conducted with registered seed treatments to ensure the viability of our inoculants is not compromised by pesticides and other seed treatments. Each inoculant formulation is tested with various seed treatments, using different application methods on specific crops. The planting windows presented are specific to BioniQ®, JumpStart®, TagTeam®, Optimize® LV, QuickRoots® and Cell-Tech® only and should not be used for other inoculants. Recommendation of compatibility made on the basis of product formulation at the time of testing – user assumes all risk. The information provided herein is based on data we believe to be reliable. It is offered in good faith but without warranty as conditions and methods of use of the products are beyond our control. For the most up to date compatibility, contact FMC at 1-833-362-7722 or aghotline@fmc.com. Tank mixtures: The applicable labeling for each product must be in the possession of the user at the time of application. Follow applicable use instructions, including application rates, precautions and restrictions of each product used in the tank mixture. Always predetermine the compatibility of tank mixtures by mixing small proportional quantities in advance.

Application Methods

Sequential application means the seed treatment must be applied and allowed to dry before the inoculant is applied.

Simultaneous application means the seed treatment can be applied at the same time as the inoculant, but separate applicators must be used.

Reverse sequential application means the inoculant must be applied and allowed to dry before the seed treatment is applied.

Tank mix application means the inoculant can be mixed directly with the seed treatment and applied as one solution, using one applicator. When tank mixing an inoculant with another seed treatment, please refer to the label to determine if the product needs to be dissolved in water prior to mixing with the chemical seed treatment. Please refer to the product label for the maximum time the inoculant can be tank mixed with the seed treatment before applying to seed.



**If you would like more information or have questions,
contact your local Biologicals by FMC representative.**