



2020 Fungicide Status for Control of Stemphylium Leaf Blight of Onion

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| Product and Rate/A | Active ingredient(s) | FRAC group (sub-class) a.i designation ¹ | Disease Control Rating ² | | |
|------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------|---------------------------------------------------|---------------------------------------|---------------------|
| | | | SLB | BLB | DM ³ |
| Top Performing Treatments for SLB | | | | | |
| BEST! Quadris Top 14 fl oz + Tilt 8 fl oz | difenaconazole, azoxystrobin propiconazole | 3b , (11a) ⁴ 3a | VG | VG-G | Yes (11) |
| Luna Experience 10 fl oz | fluopyram, tebuconazole | 7(1) , 3c | VG | VG | No |
| Inspire Super 20 fl oz | difenaconazole, cyprodinil | 3b , 9b | VG | VG-G | No |
| Luna Tranquility 16 fl oz | fluopyram, pyrimethanil | 7(1) , 9a | VG | VG | No |
| Elba Only! Scala 9 fl oz + Rovral 1 pt | Pyrimethanil + iprodione | 9a , 2 | VG | VG | No |
| Middle-of-the-Pack for SLB Control (~50% Control) | | | | | |
| Tilt 8 fl oz | propiconazole | 3a | G | F | No |
| Viathon 3 pt | tebuconazole, phosphorous acid | 3c , (P07) | G | F | Yes (P07) |
| Quadris Top 14 fl oz | difenaconazole, azoxystrobin | 3b , (11a) | G | F-P | Yes (11) |
| Luna Tranquility 12 fl oz | Fluopyram, pyrimethanil | 7(1) , 9a | F-G | G | No |
| Significantly Better than Nothing, but Not Great for SLB (~ 20-33% control) | | | | | |
| Bravo 3 pt | chlorothalonil | M5 | P | VG | No |
| Switch 14 fl oz | Fludioxonil, cyprodinil | 12 , 9b | F-P | G-F | No |
| Scala 18 fl oz – Elba - Wayne - Oswego | pyrimethanil | 9a | G F-P F-P | G-VG F-P P | No |
| Rovral 1.5 pt – Elba - Wayne - Oswego | iprodione | 2 | var ⁵ P-F P | Fail P P | No |
| Scala 9 fl oz + Rovral 1 pt - Wayne - Oswego | Pyrimethanil, iprodione | 9a , 2 | P P | F-P P | No |
| Endura | boscalid | 7(3) | P | F-P | No |
| Miravis Prime 11.4 fl oz | Pydiflumetofen, fludioxonil | 7(4) , 12 | var ⁶ | P | No |
| Omega 16 fl oz (Elba, 2015) | fluazinam | 29 | P-F | VG ⁷ | No |
| Gavel 2 lb (Elba, 2015 & 2017) | zoxamide, mancozeb | 22 , (M3) | P | ?? | Yes (M3) |

Cont. 2020 Fungicide Status for Control of Stemphylium Leaf Blight (SLB) in Onion.

| No Activity on SLB | | | | | |
|--------------------|------------------------------|-----------|------|----------------------------------|-----|
| Mancozeb 1 – 3 lb | mancozeb | M3 | none | G ⁸ /Fail | Yes |
| Quadris | azoxystrobin | 11a | Fail | none | Yes |
| Cabrio | pyraclostrobin | 11b | Fail | none | Yes |
| Tanos | Cymoxanil, famoxadone | 27, 11c | Fail | none | Yes |
| Cannonball | fludioxonil | 12 | Fail | Fail | No |
| Pristine | Boscalid, pyraclostrobin | 7(3), 11b | Fail | P | Yes |
| Merivon 9 fl oz | Fluxapyroxad, pyraclostrobin | 7(2), 11b | Fail | Fail (Wayne) F-G (Elba) | Yes |

¹**FRAC Group:** Fungicide Action Committee. Fungicide active ingredients belonging to different FRAC groups have different modes of action (MOA). **FRAC sub-classes:** Fungicide active ingredients within the same FRAC group may affect the same MOA, but in a slightly different way. For simplicity, fungicide active ingredients from different sub-classes within the same FRAC are categorized as “1, 2, 3...” Different fungicide **active ingredients** that belong to the same sub-class of FRAC group are designated as “a, b, c...” and may attach to the the pathogen in subtly different ways from each other. Theoretically, the more frequently FRAC groups, FRAC sub-classes and active ingredients per FRAC sub-class are rotated, the less likely the pathogen will be able to develop fungicide resistance.

²**Disease Control Rating: SLB:** Stemphylium leaf blight; **BLB:** Botrytis leaf blight’ **DM:** Downy mildew. **E:** Excellent; **VG:** Very good; **G:** Good; **F:** Fair; **P:** Poor; Fail. Ratings based on Cornell trials with emphasis on most recent field trials 2018-2019, unless otherwise specified.

³For DM: Yes – has activity as a protectant. No – no activity.

⁴FRAC codes in brackets indicate active ingredient with no activity on SLB or BLB.

⁵**Variable results** in Elba 2019 trial: **Rovral 1.5 pt** had healthy foliage, but higher SLB target spot lesion counts and % SLB colonization of dieback tissue.

⁶**Variable results** in 2019 trials: **Miravis Prime**, despite having higher counts of SLB target spots, foliage appeared relatively healthy. However, it did not perform as a brand new FRAC 7 sub-class should.

⁷No BLB data on Omega from New York, but it is reported to be very good on BLB in Georgia and Quebec. It will be trialed in 2020 field trials in NY.

⁸In 2019, field trial results showed that when mancozeb 1 lb was applied at first detection of BLB, it provided as good control of BLB as Bravo 3 pt. When spray program commenced at threshold (1.0 BLB halo lesions/leaf), it did not control BLB.