



## TECHNICAL INFORMATION BULLETIN

### OVERVIEW

For advisors and growers who strive to deliver the highest quality fruit, Intuity™ Fungicide is a new, next-generation strobilurin. *Intuity* provides preventive Botrytis bunch rot control in grapes and Botrytis gray mold control in strawberries. *Intuity* has an excellent fit in full-season programs, delivering performance equal to or better than standards.



### TECHNICAL FEATURES

- ▶ Unlike other strobilurins, *Intuity* provides strong, intrinsic activity against Botrytis—even in varieties that are notorious for Botrytis
- ▶ *Intuity* delivers protectant and residual Botrytis control through locally systemic and translaminar activity
- ▶ *Intuity* strengthens powdery mildew programs by providing consistent suppression on bunches and leaves

### MODE OF ACTION

The active ingredient in *Intuity* is mandestrobin, which acts as a mitochondrial respiration inhibitor and disrupts the energy cycle in fungi. This reduces fungal growth and sporulation. *Intuity* has good rainfastness and exhibits translaminar activity, meaning that treatment of the upper (adaxial) surface of a leaf provides protection of the lower (abaxial) surface and vice versa.

Mandestrobin belongs to the strobilurin, or quinone outside inhibitors (QoI), class (Group 11) of fungicides as determined by the Fungicide Resistance Action Committee (FRAC).

### LABELED CROPS, TARGET DISEASES AND USE RATES

*Intuity* is labeled on the following crops as shown in the table below.

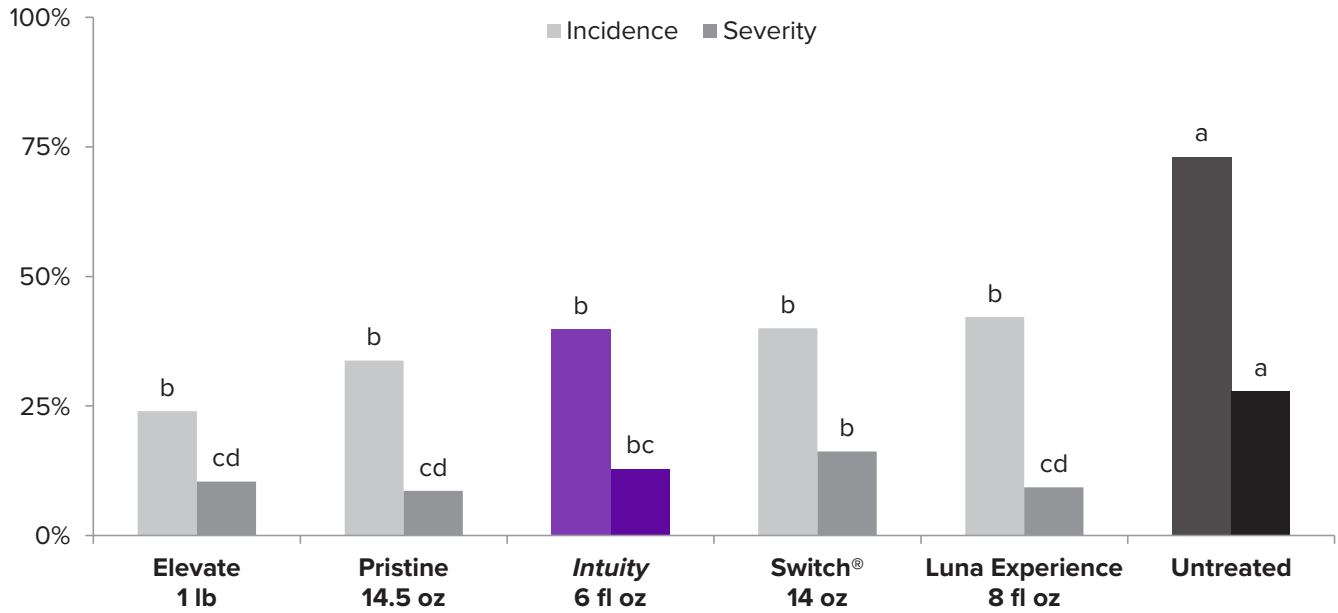
Crop	Target Diseases	fl oz/A	lb AI/A	Maximum Number of Applications/ Year	PHI	REI	Rotational Interval
Grapes	Botrytis Bunch Rot ( <i>Botrytis cinerea</i> )	6	0.19	3	10 days	12 hours	Non-labeled crops = 4 months
	Suppression only: Powdery Mildew ( <i>Uncinula necator</i> )						
Strawberries	Botrytis Gray Mold ( <i>Botrytis cinerea</i> ) Suppression only: Powdery Mildew ( <i>Sphaerotheca macularis</i> )	6	0.19	2	0 days		

## INTUITY PERFORMANCE—GRAPES

### *Intuity*—Excellent Tool for Preventing Botrytis Bunch Rot in Grapes

In research trials conducted 2013–2015, *Intuity* delivered grape bunch rot control equivalent to Switch®, Elevate®, Luna® Experience and Pristine®

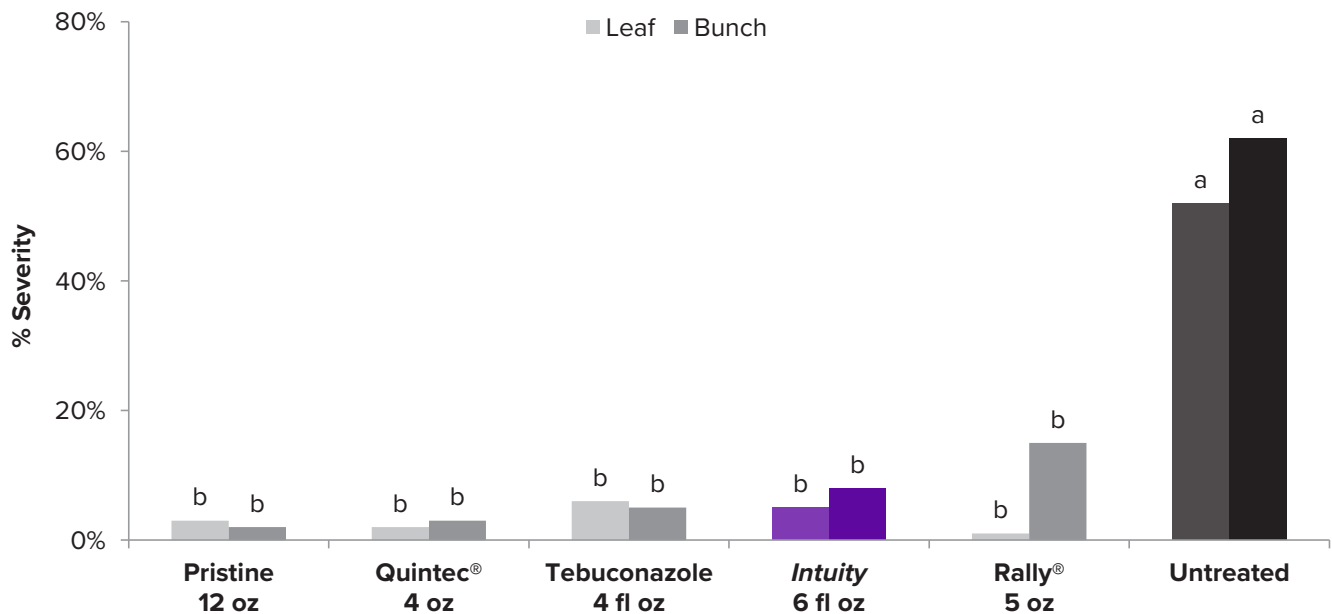
Note: Bars with the same letters are statistically equivalent



### *Intuity*—Strengthens Powdery Mildew Management Programs for Grapes

In 2013–2015 field evaluations, *Intuity* provided consistent suppression of powdery mildew on bunches and foliage

Note: Bars with the same letters are statistically equivalent

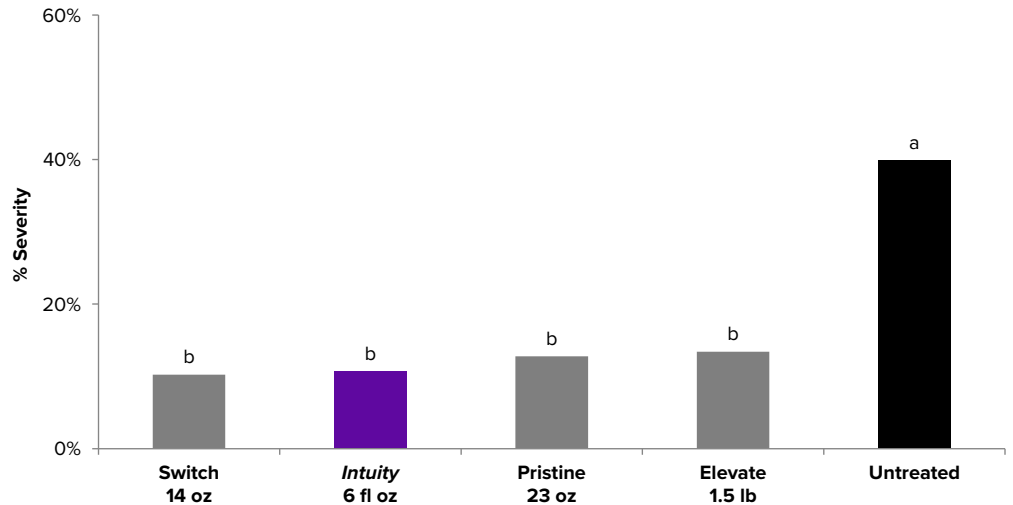


## INTUITY PERFORMANCE—STRAWBERRIES

### **Intuity—Excellent Control of Botrytis Gray Mold**

In research trials conducted from 2013–2015, *Intuity* delivered performance equal to Elevate, Pristine and Switch

Note: Bars with the same letters are statistically equivalent



## TANK MIX GUIDELINES

- ▶ Do not combine *Intuity* in the spray tank with pesticides, surfactants or fertilizers; unless compatibility charts or your own prior use has shown that the combination is physically compatible, effective and non-injurious under your conditions of use. *Intuity* has exhibited some phytotoxic effects when mixed with adjuvants that are formulated with organosilicone.
- ▶ For control of powdery mildew, tank mix *Intuity* with a non-FRAC 11 fungicide labeled for control of powdery mildew, such as those listed in the following table. Follow tank mix partner label instructions and application rates for controlling powdery mildew.

## BOTRYTIS AND POWDERY MILDEW TANK MIX AND ROTATION GUIDELINES

For resistance management, do not make sequential applications of *Intuity* or other FRAC 11 fungicides. Rotate *Intuity* with non-FRAC 11 fungicides as suggested in the following table.

**Intuity is a FRAC 11 Fungicide. The following table provides options for using *Intuity* in a rotation program for resistance management and for tank mix partners to add powdery mildew control.**

<b>Intuity Botrytis Rotation Partners:</b>	<b>Intuity Powdery Mildew Tank Mix Partners:</b>	<b>Do Not Tank Mix or Rotate Intuity with:</b>
Luna Experience (FRAC 3/7)	Quintec (13)	Abound®, Flint® or Sovran® (11)
Aprovia®, Fontelis®, Kenja® (7)	Mettle®, Procure®, Rally, Rhyme™, Rubigan®/Vintage®, tebuconazole (3)	Merivon®, Pristine (7/11)
Inspire Super® (3/9), Scala® or Vanguard® (9)	Topsin® M (1)	Quadris Top® (3/11)
Switch (9/12)	Torino® (U6), Vivando® (U8)	Other FRAC 11 fungicides (including premixes containing FRAC 11 fungicides)
Elevate (17)	Sulfur (M2)	
Other non-FRAC 11 fungicides registered for bunch rot control	Other non-FRAC 11 fungicides registered for powdery mildew control	

## MAXIMUM RESIDUE LEVELS (MRLs)

	Intuity MRLs (ppm)*					
	U.S.	Canada	Japan	EU	South Korea	Codex
Grapes	5	5	10	2019 (estimated)	5	2020–21
Raisins	7	7	—		—	
Strawberries	3	3	3		—	

\*As of September 2017

## FORMULATION

**Type:** Suspension Concentrate (SC)

**% AI:** Contains 43.4% mandestrobin by weight (4 lb mandestrobin per gallon)

## IDENTITY, PHYSICAL AND CHEMICAL PROPERTIES

**Common name:** mandestrobin (ISO)

**Chemical name:** 2-[(2,5-dimethylphenoxy)methyl]- $\alpha$ -methoxy-N-methylbenzeneacetamide (CAS); (RS)-2-methoxy-N-methyl-2-[ $\alpha$ -(2,5-xilyloxy)-o-tolyl]acetamide (IUPAC)

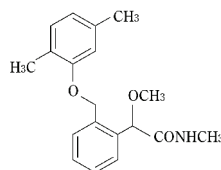
**Group name:** Quinone outside inhibitor (QoI)

**Chemical group:** methoxy-acetamide

**FRAC Code:** 11

**Resistance status:** High risk

**Chemical structure:**



## TOXICITY

**For Formulated Product:** (EPA Tox Category)

**Acute oral LD<sub>50</sub> (mouse):** 3129 mg/kg (III)

**Acute dermal LD<sub>50</sub> (mouse):** >5000 mg/kg (IV)

**Acute inhalation LC<sub>50</sub> (rat):** >2.04 mg/L (4 hour) (IV)

**Eye irritation:** minimally irritating (IV)

**Skin irritation:** minimally irritating (IV)

**Skin sensitization:** non-sensitizer

## ENVIRONMENTAL PROFILE

Under field conditions, mandestrobin readily dissipated from bare ground and managed turf with half-lives of 13 to 172 days and 3 to 16 days, respectively. The half-life in aerobic water was 8 to 19 days. Mandestrobin is more persistent in sediment. No significant leaching was observed in field dissipation or lysimeter studies. Mandestrobin was practically non-toxic to honeybees in acute studies. Mandestrobin is classified as slightly to practically non-toxic to terrestrial organisms; and moderately to highly toxic to aquatic organisms.

The information contained herein is, to our knowledge, true and accurate as of the published date of this bulletin. **THIS IS NOT A LABEL AND DOES NOT PROVIDE COMPLETE USE INFORMATION. CONTACT A VALENT REPRESENTATIVE IF YOU NEED ADDITIONAL INFORMATION.**



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