

**Supplementary Table S1. Fungicide data**

Fungicide	Family of fungicide	FRAC Numerical Code <sup>1</sup>	Mode of action	Use in controlling anthracnose or <i>Fusarium</i> fruit rot	Issues with use
Antracol (a.i. Propineb)	Dithiocarbamate fungicides – broad-spectrum multi-site inhibitor	N-phenyl carbamates; M3	Interferes at different pathways in the metabolism of fungi; on several points of the respiration chain, in the metabolism of carbohydrates and proteins, in the cell membranes.	Registered for use in a number of crops including rice, tomato, potato, apple, pomegranate, chilli pepper. Specifically registered for control of anthracnose in watermelon, rockmelon, mango, guava, peach, strawberry (Turechek, 2004; Dirou and Stovold, 2005; Bayer CropScience Egypt, 2016).	Propineb is a polymeric zinc-containing dithiocarbamate. Due to the release of zinc, the application of Antracol results in greening effect on the crop and subsequent improvement in quality of produce.  The use of certain members of this group, like mancozeb, is banned for fruit carded for export to the U.S. due to ethylene production. Following application, dithiocarbamates break down rapidly and can leave unacceptable levels of fungicide residue on the fruit (Akem, 2006). Low to medium risk of developing resistance. Resistance management required.

Valete (a.i. Fosetyl-Aluminum)	Phosphonate - multi-site inhibitor	Phosphonates: M21	Unknown	Unknown	Few resistance cases reported in few pathogens. Low risk of developing resistance.
Criptan (a.i. Captan)	Phthalamides	Phthalamides (M4)	It is believed that the degradation product of captan, thiophosgene, is responsible for reacting with multiple protein groups in enzymes including sulphhydryl groups, disrupting their native structure and thus their function (Lukens, 1969; Gordon, 2011). Ultimately, captan disrupts fungal germination, growth, and respiration (Owens and Novotny, 1959; Richmond and Somers, 1963)	Has been used to control anthracnose in a number of crops including strawberry, almond, mango (Turechek, 2004; Dirou and Stovold, 2005).	Fungi do not become resistant to captan because it blocks multiple biochemical pathways (i.e., it is a multi-site inhibitor). However, it has phytotoxic effects if it penetrates into leaf or fruit tissue (Rosenberger, 2013)
Benomyl (a.i. Benlate)	Benzimidazole - broad spectrum, systemic, single-site inhibitor	MBC - fungicides (Methyl Benzimidazole Carbamates); M1	Targets the $\beta$ -subunit of $\beta$ -tubulin, thereby disrupting microtubule assembly during mitosis, inhibits cell division and fungal growth (Davidse, 1986).	In <i>in vitro</i> experiments, benomyl inhibited growth appreciably of two <i>F. solani</i> isolates infecting bell pepper in Canada but field data was lacking (Jarvis et al., 1994). Known resistance among <i>Colletotrichum</i> spp.	Resistance common in many fungal species. Several target site mutations, mostly E198A/G/K, F200Y with positive cross resistance between the group members (Lucas et al., 2015).

<sup>1</sup>FRAC Grouping - FRAC CODE LIST 1: Fungicides sorted by FRAC Code.