



Kentan[®] DF

QUALITY CONTROL

When it comes to copper fungicides the differences among brands often comes down to one thing; quality. And what drives quality is experience. Experience in all aspects of manufacturing and formulation can make or break the disease performance of a copper fungicide.

When it comes to copper fungicides no other company has been working longer on developing the best copper fungicides in the market today. In fact, Isagro has over 100 years in the copper business and is a sales leader globally.

BIO-OPTIMIZED FORMULATION

For copper to be effective, it must come in direct contact with the pathogen (fungi, bacteria) at the effective lethal level.

It is a well-known fact that smaller copper particles have more surface area than larger particles and therefore provide better protection against pathogens.

Kentan[®]DF with its optimal particle size provides thorough coverage of all plant parts with a uniform layer of copper. This protective layer of copper creates a solid barrier against harmful diseases.

PROVEN PERFORMANCE

Kentan[®]DF has been tested by leading university researchers and growers on a variety of crops including fruit, vegetable, tree fruit and nut crops. Its efficacy has been proven under all types of environmental conditions over many years of testing. When compared to other copper fungicides Kentan[®]DF consistently provides performance equal to or better than other leading brands.

In a 2005 research report evaluating Isagro's copper products, Dr. L.W. "Pete" Timmer stated, "Kentan DF appears to be a high quality copper product and performs as well as Kocide 2000 with no more risk of phytotoxicity."

ENHANCED CROP SAFETY

Copper fungicides often contain recycled copper. Recycled copper is as good as the copper extracted from copper mines, but in some cases it can contain impurities which can harm your crops and reduce efficacy of the product. At Isagro, we carefully analyze every batch of copper used to make Kentan[®]DF thereby ensuring that our copper has the lowest levels of impurities possible.

SUPERIOR COVERAGE

Due to its patented, state of the art formulation, Kentan[®]DF possesses highly micronized and uniform copper particles resulting in increased adhesion to the plant surface.

Electron microscope imaging illustrates the uniformity and superior coverage of Isagro copper formulations compared to competitive copper formulations.

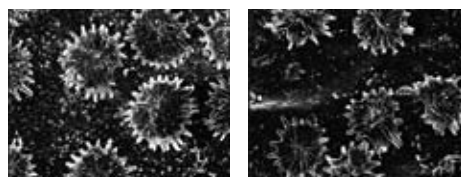
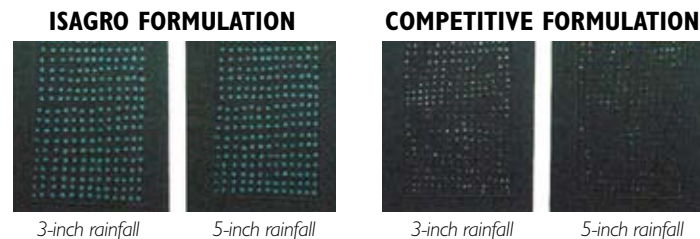


Photo shows the distribution of Isagro copper product (left) and a competitive product (right) on the leaf surface. Isagro copper particles, which are clearly visible between the star-shaped leaf hairs, are smaller in size and more numerous, providing better coverage and performance even at a reduced rate of metallic copper.

REDUCED RUN-OFF

The wash-off characteristics of a copper fungicide are an important indicator as to the quality of a product's formulation. The adhesive ability of Kentan[®]DF is without a doubt one of the more significant differences between it and other copper fungicides.

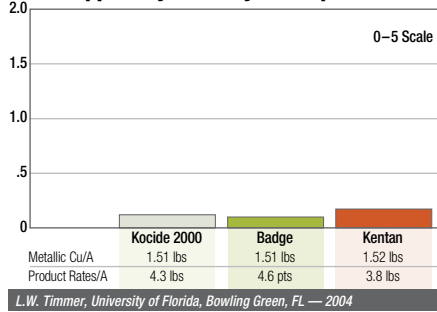
In simulated rainfall studies (shown below), the strong adhesive properties and optimal particle size of Isagro copper formulations enables more of the copper ions to stay where they're sprayed resulting in less copper run-off and longer protection. Less run-off also helps reduce copper build-up in the soil.



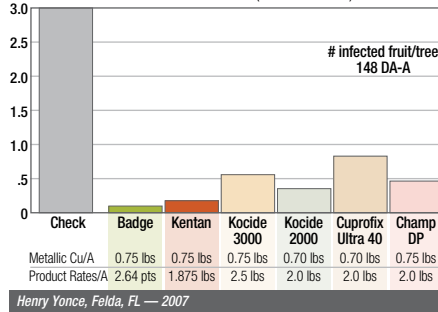


PERFORMANCE ON CITRUS

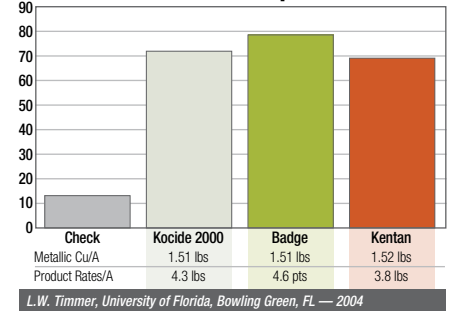
Copper Phytotoxicity — Grapefruit



Citrus Canker (Fruit Infection)

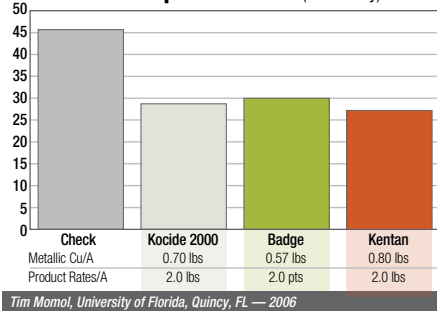


% Marketable Grapefruit

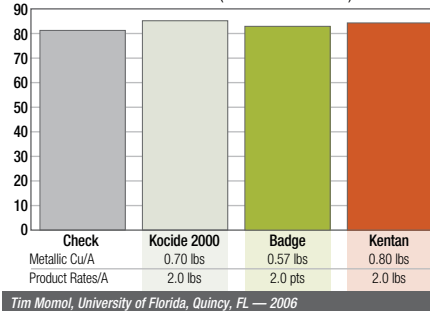


PERFORMANCE ON VEGETABLES

Bacterial Spot — Tomato (% Severity)

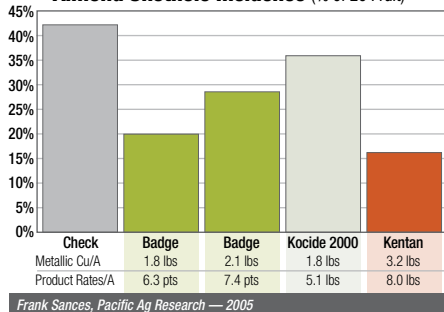


Tomato Yield (% Marketable Fruit)

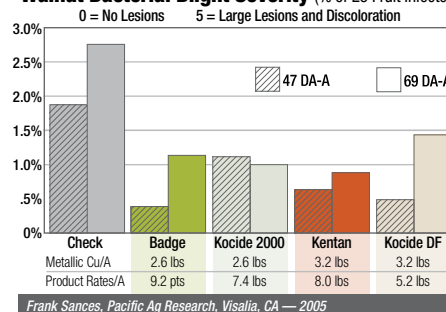


PERFORMANCE ON ALMOND AND WALNUT

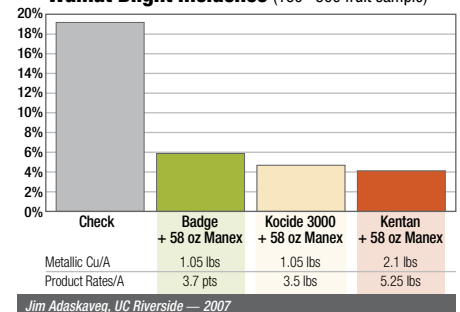
Almond Shothole Incidence (% of 20 Fruit)



Walnut Bacterial Blight Severity (% of 25 Fruit Infected)



Walnut Blight Incidence (150-300 fruit sample)



PERFORMANCE ON GRAPES

Grape Powdery Mildew (% Severity)

