



News Release (8/11/2020)

For Immediate Dissemination

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Update on Stored Grain Protectants:

Empty Bin Treatments

Centynal EC. This is a good product for treating empty bins and elevator boots. Note that the active ingredient in Centynal EC, Defense SC and Suspend SC are identical.

Defense SC (labeled for empty bin use only). This is a good product for treating empty bins and elevator boots, but is not labeled for application directly to grain. Note that the active ingredient in Centynal EC, Defense SC and Suspend SC are identical.

Suspend SC. This is a good product for treating empty bins and elevator boots. Note that the active ingredient in Centynal EC, Defense SC and Suspend SC are identical.

Tempo SC (labeled for empty bin use only). Tempo is a good product for treating empty bins and elevator boots, but is not labeled for application directly to grain.

Direct Application to Shelled Corn and Grain Sorghum

Actellic 5E. This product has long been the standard for use on corn and grain sorghum. A full rate will provide protection from weevils for 9-12 months. Reducing the rate will decrease the longevity of the protection. UGA data suggest that Actellic is susceptible to heat degradation in the drier when grain temperatures exceed 120 F.

Centynal EC. Our data show that Centynal EC by itself is inadequate, but a tank mix of Centynal (8.5 oz) plus PBO-8 Synergist (13.5 oz) per 1000 bu will provide 6 months of protection from weevils. This material is heat stable in the drier (tested up to 150 F).

Diacon IGR. Diacon IGR is an insect growth regulator that is effective for killing nearly all immature grain moths and beetles, except weevils. The 4 oz per 1000 bu rate is sufficient for tank mixing.

Diacon IGR PLUS. This product is a premix of Centynal EC and Diacon IGR. It works well for short term storage (4-5 months), but is much better (9 -12 months) if you tankmix with PBO-8 Synergist (13.5 oz)

Malathion. Although widely used in the past, this product is no longer recommended due to well documented resistance in many stored grain insect populations. Expect malathion to break down in the drier.

Sensat. This product is new to the market, but has been in our evaluation program for several years. Test results show excellent weevil control for up to 12 months. No dryer stability data at this time.

Storcide II. Storcide II is labeled for use on wheat and grain sorghum, but not corn. Protection will degrade with heat and time.

Suspend SC. This product is an older formulation that must be completely suspended before measuring and requires frequent agitation. It provides 3 to 6 months of protection from weevils.

Three-way tankmix (only tested on corn). UGA tests from 2014-2018 showed that a three-way tank mix of Centynal (8.5 oz) plus Diacon IGR (4 oz) plus PBO-8 Synergist (13.5 oz) per 1000 bu will provide 6-9 months of protection from weevils. This is a moderately priced option for growers in markets where other products are unavailable or cost is a limiting factor.

Regardless of the product used, be mindful that grain protectants are not a silver bullet. Shelled corn should be dried to a maximum of 15.5% moisture content before dropping into the storage bin and must be immediately aerated to further reduce moisture content. Chemical applications should only be made to clean grain that will be stored for more than 3 months. Apply protectants at the bottom of the auger in a course spray to maximize coverage as the kernels are moving up to the top of the bin. Long-term grain storage requires moisture content below 14%, proper housekeeping, use of a spreader when filling bins, and managed aeration.

Additional information is available in the 2020 Georgia Pest Management Handbook under the chapter titled: Stored Product Insect Management.