STROBILURINS AND 1-MCP EFFECTS ON CORN STRESS

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Azoxystrobin brand fungicides (Quadris® & Quilt®) provide physiological benefits in corn, helping it reach maximum yield potential. Effects include enhanced CO₂ assimilation & more efficient photosynthesis, reduced transpiration for improved water-use efficiency & enhanced green leaf area. Azoxystrobin, an ACC-synthase inhibitor, decreases production of ethylene, a plant hormone with a key role in senescence. Reduced ethylene allows delayed senescence so plants remain green longer, allowing up to 8 more days of photosynthesis. Benefits include enhanced yield, crop quality & harvest-ability. In >800 large scale corn trials since 2006, Azoxystrobin treated corn yielded an average 10-15 bu/a > untreated plots. 1-MCP (Invinsa) blocks ethylene receptors in plants, thereby inhibiting recognition of this stress signal. Effects in corn are reduced stress mitigation, allowing later senescence & less leaf curl, thereby allowing increased photosynthesis & potentially higher yield.