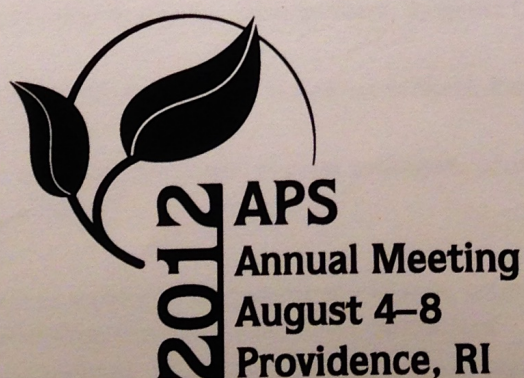


Fungicide Resistance Development in North America for the 21st Century WORKSHOP

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♦ Fungicide resistance in strawberries.

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Fungicide resistance has developed in *Botrytis cinerea*, the causal agent of gray mold of strawberry. Resistance to methyl benzimidazole carbamates (MBC) and dicarboxamides (DCs) have been reported in California, Oregon, Louisiana, and North Carolina (2, 5, 8, 9). Simultaneous resistance to multiple chemical classes including succinate dehydrogenase inhibitors (SDHIs), quinone outside inhibitors (QoIs), MBCs, anilinopyrimidines (APs), DCs, hydroxylanilides (HAs), or phenylpyrroles (PPs) were found in *B. cinerea* from California (7), Florida, North Carolina, and South Carolina strawberry fields (1, 3, 7). Resistance to SDHIs, QoIs, MBCs, and HAs is caused by mutations in the corresponding target genes, however, resistance mechanisms for APs, DCs, and PPs are still unknown. A regional resistance-monitoring program has been implemented to help growers determine location-specific resistance profiles. Resistance to other pathogens of strawberry is limited to MBCs in *Colletotrichum acutatum* and *C. fragariae* (6, 8) or localized and of little economic importance (*Phytophthora cactorum* and *Podosphaera aphanis*) (4).

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♦ Fungicide resistance in citrus.

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