Research impact statements/success stories

APPLICATIONS OF NEW PEST STATEGIES IN CRANBERRIES

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Cranberries, a native North American crop, are farmed in environmentally sensitive areas in coastal Oregon and Washington. They are subjected to the depredations of numerous weed, insect and disease pests. These pests are problematic because they lack effective environmentally benign selective pesticides. The industry's top research priorities are focused on these pests. Weeds alone account for up to 25% reduction in cranberry yields in the PNW. Research co-funded by the USDA Northwest Center for Small Fruit has led to registration of many new chemistries with reduced-risk classification (Confirm, Success, Intrepid, Admire, Actara, Abound, Avaunt, Callisto, Indar), pending registrations (Classic and clothianidin) and IR4 projects (chlorantraniliprole).

The impact of these new chemistries in terms of increased yield, improved quality, and reduction in labor has been worth up to a million dollars to PNW cranberry growers. Since their registrations have only just occurred, the full impact of their usage has yet to be fully realized. One new reduced-risk herbicide, Callisto, has had and will continue to have a huge impact on the cranberry industry in the PNW. Several weed species have gone from being major weed pests to non-significant pests. Increases in yield on weed-infested beds are up by 25 to 100%. Based on increase in grower returns in OR, WA and BC the project will increase cash farm value to the PNW by more than $1,000,000/year. The impacts of other new pesticide management tools resulting from this research have been less profound, but still significant. Abound has all but eliminated cottonball as a cranberry fruit pathogen, and Admire and Actara have helped minimize crop losses from blackvine weevil.