

THE IMPACTS OF SOIL WETTING AGENTS ON UTAH FORAGE PRODUCTION

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ABSTRACT

Soil wetting agents used commonly in turfgrass are gaining interest and traction in field crop production. Utah crop advisors and growers report soil wetting agent applications to hundreds of acres across the state. Three commonly used products are AquaDrive®, PeneCal®, and APSA80®. Companies and growers claim these products improve infiltration, reduce ponding, and increase crop productivity. However, limited studies have been conducted in the Intermountain West, or in production agriculture, to validate whether these products improve irrigation or crop productivity. Studies spanning from 2019 through 2023 collected a total of 14 site-years of data at university trials with a deficit and full irrigation and in on-farm trials with full irrigation. Statistically, no differences were seen between products and the control within irrigation treatments on yield and quality differences were inconsistent. Soil moisture sensors suggested increased moisture in the profile, but it did not translate to yield benefits or maintenance in deficit irrigation treatments. Alfalfa, silage corn, and three-way grains forage yield and forage quality will be presented.

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