## **RESEARCH UPDATES**

## NEW YORK - Tall Fescue Seeding Rates for Mixtures with Alfalfa Jerry Cherney, Mike Davis, Debbie Cherney, Cornell University

Ifalfa/tall fescue mixtures can produce lactating dairy cattle forage. In late-summer 2004, 'Hoedown' and 'Festival' tall fescue were sown with 12 lbs/acre alfalfa at Ithaca and Mt. Pleasant, NY. Tall fescue was seeded at 2, 4, 6, 8, and 10 lbs/acre with 5 replicates of both varieties. There were no differences in results between tall fescue varieties.

In 2005 in Ithaca, only 2 lbs/acre fescue had greater alfalfa percentage than higher rates (40% vs. 25%). Drought during 2005 at Mt. Pleasant resulted in greater alfalfa percentage (avg. 48% alfalfa) compared to Ithaca (avg. 28% alfalfa). In 2006, alfalfa percentage was unaffected by grass seeding rate, averaging 36% alfalfa; but stands were highly variable at Mt. Pleasant.

2004 was a relatively good fall for establishment. Poorer establishment conditions would likely have a more negative impact on the lesser grass seeding rates in mixtures. In general, all tall fescue rates in these late-summer 2004 seedings resulted in too little alfalfa in the mixtures.

As a follow-up in spring and fall 2007 and spring 2008, trials were established at Ithaca and Chazy, NY. Alfalfa was seeded at 15 lbs/acre. 'Enhance' tall fescue was seeded at 0.5, 1, 2, 3, 4, 5, 6, and 8 lbs/acre in 6 replicates. Dry conditions persisted for all 3 seedings at Ithaca and for the spring 2008 Chazy seeding.

Seeding under dry conditions resulted in variable alfalfa stands and very poor tall fescue stands. Ithaca stands were too poor to evaluate, and neighboring farmers had similar results; mixed seedings ended up almost exclusively alfalfa. The spring 2007 seeding at Chazy behaved more like the late-summer 2004 seedings; grass seeding rates ≥ 2 lbs/acre resulted in ~50% grass. The drier fall 2007 seeding had a linear increase in grass with seeding rate, but reached only 30% grass at 8 lbs/acre. The 2008 Chazy seeding was too poor to evaluate.

Results across these NY trials were exceptionally variable, primarily due to moisture after seeding. Without being able to predict moisture availability, seeding 4-6 lbs/acre tall fescue with alfalfa may be best.

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