## **WQS Whole Plant Silage Evaluation**

In 2007, WQS cycles 0 through 3 and testcrosses to two stiff stalk testers, LH244 and LH332, were planted in two row plots in three replications in two locations, Madison and Arlington, WI. Checks included were W604S x both stiff stalk testers, two *bm3* hybrids (Mycogen F697 and F2F633), a low digestibility check (WFIHISI C3), and a grain hybrid (Pioneer 34A20).

Trials were planted in Madison on 5/7 and in Arlington on 5/21. June and July were very dry in both locations followed by a rainy, wet August that contributed to significant lodging in both locations. Plots were harvested at silage stage in Madison on 9/5 and on 9/13 in Arlington. Whole plant dry matter percent and yield were calculated (DM% average- 38.6%; DM Yield average- 8.6 Mg/ha).

Dried samples were ground for NIRS estimation and laboratory analysis of several silage quality traits: neutral detergent fiber (NDF), acid detergent fiber (ADF), acid detergent lignin (ADL), *in vitro* true digestibility (IVTD), *in vitro* NDF true digestibility (NDFD), Starch, and crude protein (CP). Milk yield per hectare and per Mg dry matter were estimated using Milk2006. Quality values reported for NDF, ADF, IVTD, NDFD, Starch, and CP are based on NIRS prediction based on a global calibration set of ~800 silage samples developed for silage evaluation at UW. ADL, NDF closed, and ADF closed were all predicted from an internal calibration based solely on laboratory values from this study.

This study will be repeated in 2008.