STORING ALFALFA IN SILAGE BAGS VS. BALES

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Interest in harvesting alfalfa as silage and storing it in plastic bags has increased in recent years, especially in the northern part of the San Joaquin Valley. Alfalfa is cut, wilted, raked and then chopped into forage wagons. It is then hauled to the bagging machine and pressed into plastic tubes 8 feet in diameter x 150 feet long or 9 feet in diameter x 135 feet long. These tubes are sealed, the alfalfa is allowed to ferment and fed when needed.

Bagging offers many possible advantages over conventional baling: The crop is removed in a day, allowing immediate irrigation, field losses are decreased since the alfalfa is wet, and there is no traffic damage caused by a baler or harrowbed.

A trial was designed to look at two of these factors, traffic loss and bale shatter loss. Each treatment was composed of the harvest method from the previous and the current cutting. Bagging following bagging was the assumed maximum yield from a plot. Bagging following baling was an indication of traffic losses due to the previous baling, while baling following bagging was an estimate of the shatter losses due to baling. The baling following baling treatment was a combination of the shatter and traffic losses. Treatments were replicated twice each cutting and data was collected over two cuttings.

Storage and feeding loss with bags was estimated by weighing all feed into and out of full silage bags holding approximately 95-100 tons of wet alfalfa silage. Crude protein and a fiber determination were run on all samples to determine any changes in feed quality.

At the time of this writing not all the lab work and feed recoveries on the silage bags have been completed. The complete trial results will be available at the symposium.