Replacing forages with beet pulp in dairy cow diets

Fernando Díaz

Sugar beet is a temperate climate crop grown mainly for production of sucrose. Beet pulp, the main co-product obtained during the process, is a common ingredient in dairy cow diets. Beet pulp is a good nonforage fiber source with high levels of digestible fiber and pectic substances.

According to CNCPS Feedbunk from Cornell University, fiber (NDFom), non-fiber-carbohydrates (NFC), and sugar contents in dry beet pulp are 36.8 – 41.6%, 35.4 – 40.4%, 10.0 – 13.3% of dry matter (DM), respectively. Protein concentration, however, uses to be low (10.0% DM).

A recent study published in Journal of Dairy Science reported the effect of replacing conventional forages (corn silage and alfalfa hay) with a combination of beet pulp and wheat straw on high-production cow performance. The beet pulp
fed in this study had very high sugar content (18.6% DM; table).