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CENTA SS- 44, New Sorghum Forage Hybrid for El Salvador

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CENTA SS-44 forage sorghum under a protective cover in a silo

"Cows love to eat the foliage of CENTA SS-44 because it is sweet, succulent and palatable"

One of the major problems plaguing the development of the Central American dairy industry is the lack of good quality forage which results in low milk and meat production and an increase in production costs. Many dairy farmers, in their search for suitable forage to feed their cattle herds, utilize poor qulity sorghum or maize hybrids which can result in economic losses.

In the case of sorghum, the major problem is a lack of cultivars that (1) are early, (2) grow rapidly, (3) are of proper plant height, (4) are resistant to diseases, (5) have high yield potential and (6) produce high quality green matter. Thus CENTA scientists are searching for alternatives to current forages for the feeding of dairy cows.

Now El Salvador scientists have developed a new hybrid forage sorghum, CENTA SS-44, which has the above attributes and significantly increases milk and meat production.

Origin of CENTA SS-44

CENTA SS-44 is a cross between a sorghum line ICSA 275 and TX 2784, a Sudan grass line, made by Centro Nacional de Tecnologia Agropecuaria y Florestal (CENTA) with the support of INTSORMIL. Five years in development, the forage sorghum hybrid CENTA SS-44 was selected from among many hybrids generated by CENTA for its adaptation to El Salvador growing conditions and for its abundant and

René Clará Valencia, CENTA sorghum breeder observing CENTA SS-44 plants at the Ahuachapán agricultural fair

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CENTA SS-44 seed

The Minister of Agriculture and Livestock Lic. Mario Ernesto Salaverria and CENTA scientists observing hybrid seed production of CENTA SS-44 sorghum in El Salvador

high quality forage.

The new hybrid CENTA SS-44 was compared with the best forage varieties (CENTA S-2, RCV and Sureño) which are grown throughout Central America and was superior to the check varieties in yield, quality, adaptability and tolerance to pests and diseases. In country- wide validation tests CENTA SS-44 produced 35 metric ton/manzana (mt/mz) (manzana= 0.7 ha) green forage and 9 mt/mz dry forage while the commercial check produced only 30 and 7.3 mt/mz respectively. A five ton increase in forage is a significant increase! In addition, crude protein of CENTA SS-44 averaged 17% while the check variety (Sureño) was only 9%. In a test conducted at three locations in El Salvador average milk production increased 21% over the traditional sorghum used by dairy farmers when the cows were fed CENTA SS-44 forage.

Release of CENTA SS-44 by President Saca

President of the Republic of El Salvador, Don Elías Antonio Saca, on May 17, 2006 officially released the new forage sorghum hybrid sorghum CENTA SS-44, at the "Launching of the Agricultural Year Celebration" in the city of Turin, Ahuachapán, El Salvador. The President stated that CENTA SS-44 will give a big boost to the El Salvadoran and Central American dairy farmers because of its excellent characteristics. The Minister of Agriculture and Livestock Lic. Mario Ernesto Salaverría, told the farmers attending the festival that "we want to give a big boost to the cattle and dairy sector with the release of this new multicut forage sorghum hybrid because it has excellent feeding qualities and will increase the present average milk production by 25 to 30 percent." CENTA SS-44 is a much better forage sorghum than any other variety available in Central America.

Cutting CENTA SS-44 sorghum forage in El Salvador (above)

White panicle of CENTA SS-44 sorghum (left) and a red panicle of an experimental hybrid (right) in upper left photo, dairy cows eating CENTA SS-44 forage (upper right photo), a dairy farmer weighing the milk produced by cows feeding on CENTA SS-44 (left photo below) and field of CENTA SS-44 (right photo below)

Outstanding Characteristics

According to Dr. Rene Clara, INTSORMIL Regional Coordinator for Central America and CENTA sorghum breeder, the other outstanding characteristics of CENTA SS-44, "in addition to being tolerant to sorghum powdery mildew and other foliar diseases are its rapid growth (5 cm/day) , ability to be cut several times (a greenchop multicutting hybrid), good recovery and tillering ability after being cut, high protein content, low hydrocyanic acid content from 60 cm of height and above, and high yield of green matter of 30-35 mt/mz. Dr. Clara, the sorghum breeder responsible for the development of the new hybrid and referred to as the Father of CENTA SS-44, stressed that "cows love to eat the foliage of CENTA SS-44 because it is sweet, succulent and palatable."

Contribution to Health and the El Salvadoran Economy

According to the CENTA scientists involved in the evaluation of CENTA SS-44 in farmers' fields the new sorghum forage hybrid has potential to significantly impact not only the El Salvadoran dairy industry but the entire agricultural community. They say it will contribute to the dairy farmers income by increasing the profit of milk and meat production, contribute to the improved health of consumers, boost agricultural development and increase employment.

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