

## **Evaluation the impact of extraneous matter on quantitative and qualitative factors in sugarcane processing**

### **Abstract**

Sugar cane one of the main sources for sugar production in Khuzestan. Control sugar from harvesting and post harvest processing is important and need much laboratory works for reducing losses through all working application at the factory. The percentage of sugar obtaining from sugarcane (other than the genetic properties such as the amount of fiber, etc.), is influenced by different factors during processing. An experiment was conducted in Debal Khazayi Agro industrial company in 2011 Agricultural season. All factors including the percentage of extraneous matter, pol, qualitative and quantitative profile of sugar cane, bagasse, raw juice, clarify juice, filtercake, syrup and molasses, were measured each day and average weight recorded, and analyzed every other week. According to the results by one percent increase in sugarcane extraneous matter, there will be 0.35 increase in fiber, 0.2 in bagasse pol and reduce 0.2 unit of row juice pol and 0.42 of unit of theoretically recoverable sugar efficiency. One percent increase in tops due to reduce 0.42 percent brix, 0.3 pol and 0.7 percent purity of raw juice and 0.89 percent purity of clarify juice, the losses due to transport extraneous matter (6.38 % in the test), about 487.6 million rials and 126.9 on the functioning of the plant, 14873 tons of sugar and the potential was lost.

**Keywords:** Sugarcane, losses, processing, Bagasse, Molasses, Filtercake, Extraneous matter, Tops.