

**JUICE PROPERTIES OF SOME SUGAR BEET  
VARIETIES AS AFFECTED BY ORGANIC  
AND BIOCHEMICAL FERTILIZERS**

**Gomaa, M. A<sup>1</sup>, H. A. Basha<sup>1</sup>, M. A. Farag<sup>2</sup>,**

**and Hanan, Y. M. Yousif<sup>2</sup>**

**1. Agron. Dept., Fac. of Agric., Zagazig Univ., Egypt.**

**2. Sugar Crops Res. Institute, Agric. Res. Center, Giza, Egypt.**

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**ABSTRACT:** Two field experiments were carried out at Tymour region , El Hosania district, El Sharkia Governorate during 2003 / 2004 and 2004 / 2005 seasons to study the effect of organic (treated with compost and untreated) and biochemical fertilizers (90 kg N , 45 kg N , 500 gm cerialin , 1000 gm cerialin , 90 kg N +500gm cerialin , 90 kg N + 1000 gm cerialin and control ) on quality of three sugar beet varieties (Kawemira, Montbianco and Gluria). The results indicated that, sugar beet variety Gluria surpassed the studied varieties with respect to its quality. Where it recorded the highest sucrose and purity percentages at the mean line attained the lowest percent of sugar loss to molass and impurities (Na, K, and  $\alpha$ -amino – N). Application of compost recorded the highest purity % values. Application of 1000 gm cerialin recorded the highest sucrose % values. However the difference between this fertilization treatment and both of 500 gm cerialin , 45 kg N + 500 cerialin and 45 kg N + 1000 gm cerialin were insignificant in this respect.

**Key words:** Sugar beet, varieties, organic fertilizer, biochemical  
Fertilizer, and juice properties.

**INTRODUCTION**

Nitrogen is one of the most important element for sugar beet crop, the increase in fertilizers cost especially nitrogen prevents its use in higher levels, it was felt consider essential to find out the possibility saving of nitrogen fertilizer by optimizing use of nitrogen received much attention for optimum yield and quality. This