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ASSESSMENT OF DAMAGE IN SUGAR CANE PLANTATIONS IN
EGYPT DUE TO RATS' ATTACK

by

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Providing that the least possible planned sugar cane area for sugar production is about 50 feddans (one feddan = 4200 m²), the damage due to rats' attack could be assessed at the maturity season as follows:

1. Four replicates, 25 m² each with three treatments representing three distances from the irrigation canal, one by the canal, the second in the centre of the field and the third in between.
2. Damage is classified in three categories, i.e.
 - a. rat gnawing at the base of the plant causing falling down of the attacked stalks
 - b. damage to the apex of the plant resulting in plant stunting
 - c. gnawing along the whole plant causing fungus infection, dehydration and non-crystalline sugar product.
3. Samples of infested plants as well as sound plants are analyzed to determine the percentage reduction in sugar contents and impurities. On this basis the loss is estimated.
4. This experiment is repeated in other three farms chosen at random representing each country and the same for the other countries and governorates.

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5. It is advisable to repeat this experiment for three successive years before giving a final decision on the rate of damage due to rats.
6. Data obtained are subject to statistical analysis.