creased, while production rate of $O_2^-$ and $H_2O_2$ content of seedlings were increased progressively in CK, single site and multi-site radiation. This indicated both germination and growth of sweet Sorghum were influenced by C-ions, and the influence of multi-site irradiation was stronger than single site irradiation. In addition, $\alpha$-amylase activity was decreased by 87.9% after multi-site radiation, while $\beta$-amylase activity varied slightly. Therefore, the decrease of germination rate and total amylase activity could be attributed to $\alpha$-amylase.

Reference

3 - 33 Process of Sucrose Made by Sweet Sorghum Juice

Lu Dong, Zhang Miaomiao, Zhang Xiaolin, Li Wenjian and Gao Feng

The juice of sweet sorghum, sugar content up to 18% ~ 22%, is a good raw material for production of sucrose. The sweet sorghum juice, extracted by compression method, has sucrose besides suspended solids, colloids, organic matter, pigments, inorganic salts, etc. These materials must be clean up before evaporation and concentration. The process of sweet sorghum juice production of sucrose is as follows (Fig. 1).

1) Filtering out impurities in juice of sweet sorghum, adding milk of lime to pH 11, heating to 60°C for 30 min; the main purpose of this step is to make the sap of protein denaturation and remove impurities such as proteins, organic acids.

2) Centrifuged to remove sediment.

3) Adding phosphoric acid to adjust pH to 6, heating to 60°C for 30 min, the main purpose of this step is to minimize the juice of the lime (calcium salt) content, pigments, and to improve purity of juice.

4) Spray drying.

![Fig. 1 Process of sucrose made by sweet sorghum juice.](image-url)