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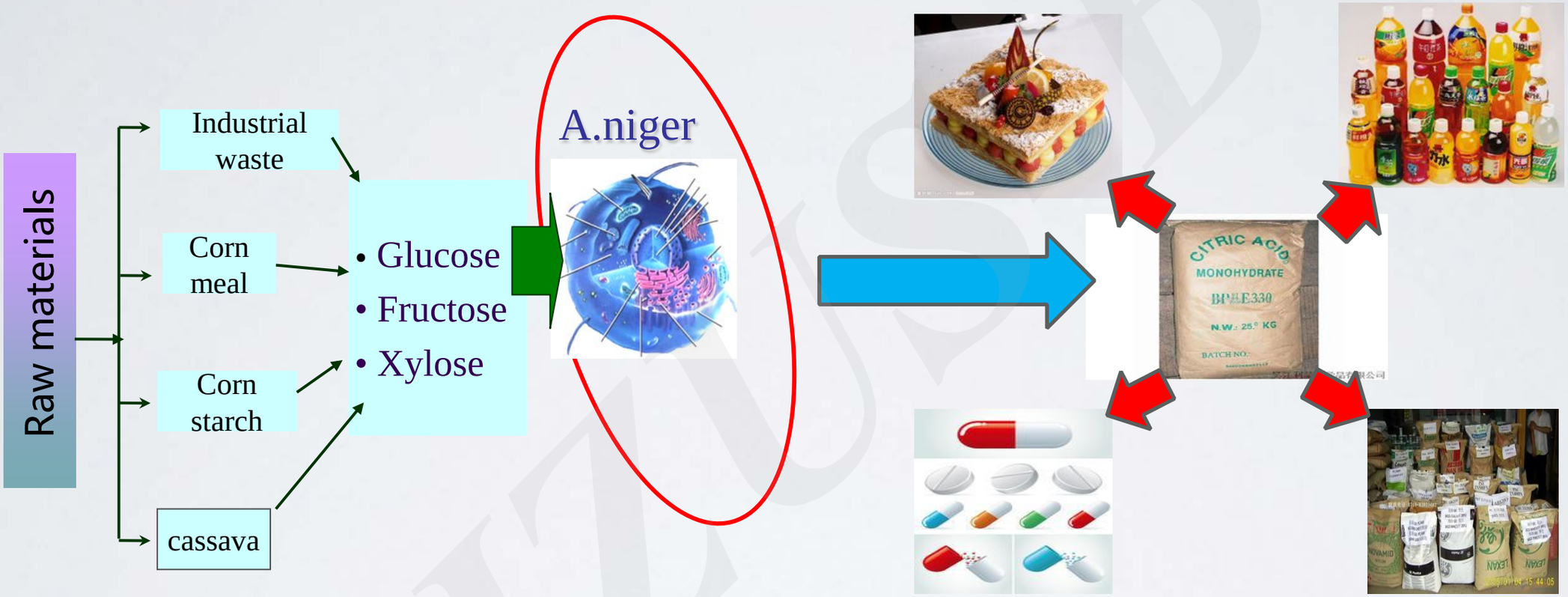
# A mutation of *Aspergillus niger* for hyper-production of citric acid from corn meal hydrolysate in a bioreactor

**Key words:** mutation, citric acid production, corn meal hydrolysate



# Research summary

**This review mainly focused on raw materials for citric acid production and application of citric acid, and summarized the key roles they played in the following aspects:**




Citric acid fermentation is one of the largest biotechnological industries (Ikram-ul *et al.*, 2004). According to various estimates, citric acid produced through fermentation is $1.7\times10^6$ ton/annum (Dhillon *et al.*, 2011) and the industrial demands for citric acid are still increasing.

# High efficient citric acid production by mutant in a bioreactor

Wild type

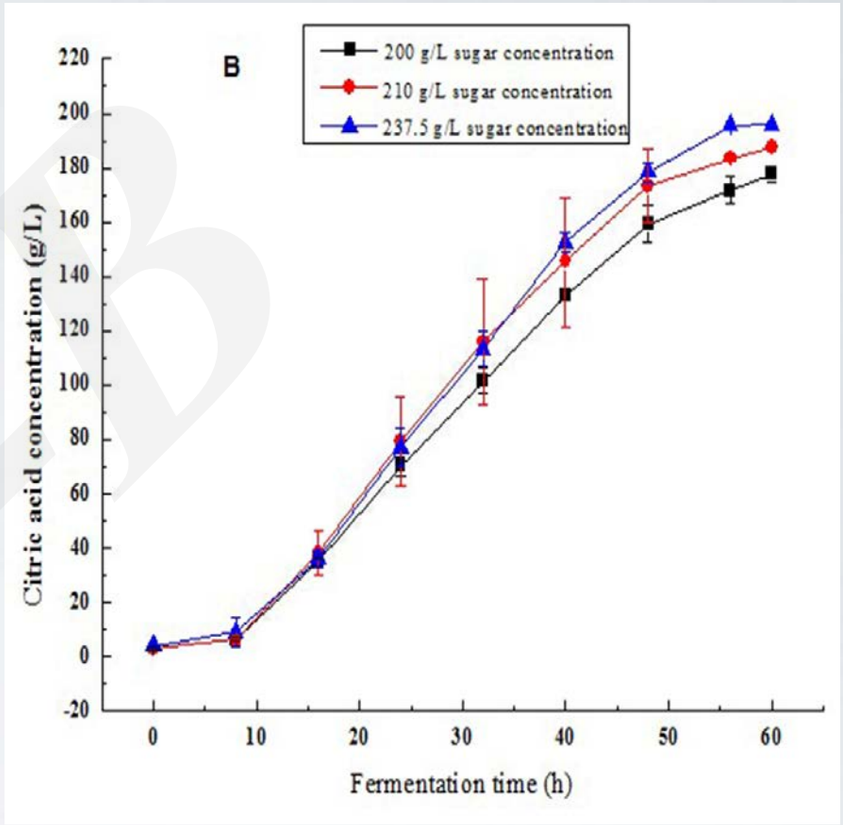
Heavy ion irradiation

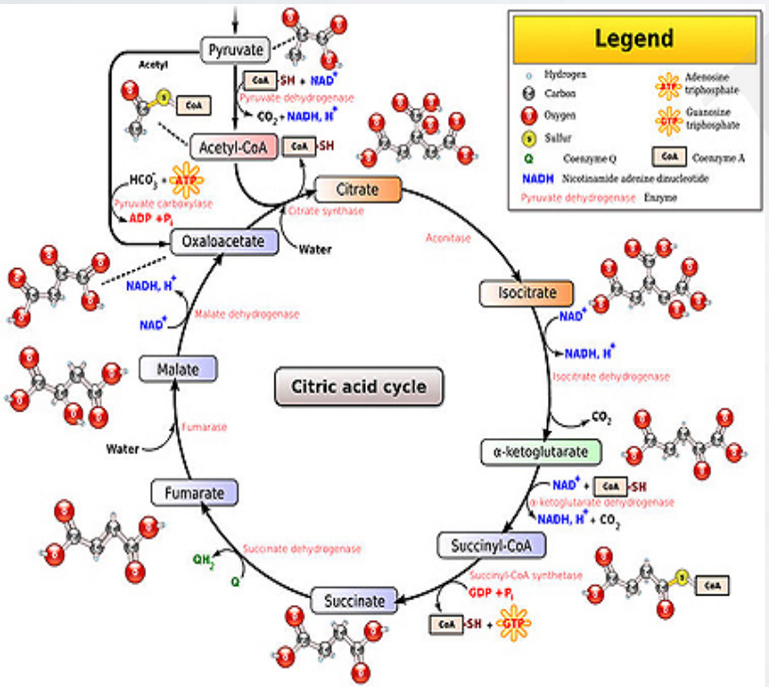
mutation selection

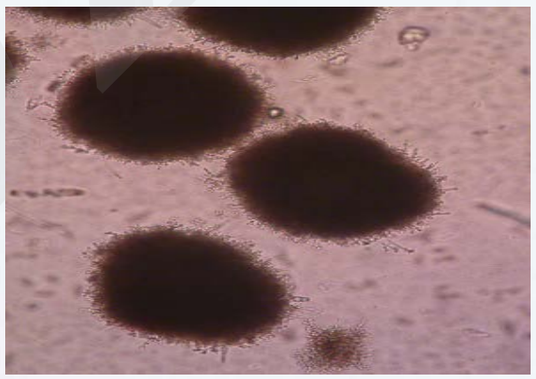
High yield mutant

Pathway for citric acid production

•hyper citric acid
•
•low sugar concentration
•
•high productivity



Pellets morphology

