

SUGARCANE

***Facilitator: Dr. Kalpita Bhatta
Dept. of Botany,
School of Applied Sciences
Centurion University of Technology and
Management Bhubaneswar***

INTRODUCTION :

- The source of sugarcane can be stems or underground roots .
- Two principle source of sugar are sugarcane & sugar beet .
- Also called as industrial plants .

The source of storage sugars are

1. Stems – sugarcane, Sugarcane maple
2. Roots – Beets , Carrots
3. Flowers – plam



SUGARCANE (*Saccharum officinarum*):

SYSTEMATIC POSITION:

Class- Liliopsida

Order- Poales

Family – Poaceae

Genus – Saccharum

Species – officinarum

Vernacular name – Ganna

- *The plant is coarse grass . It has a height of 10-20ft . The stem is solid and jointed .*
- *Sugarcane is responsible for more than half of the worlds supply of sugar .*
- *The best production of sugarcane is widely in the tropics .*

SUGARCANE GROWING REGIONS

- The chief sugarcane producing regions lies between 30 degree north and south of the equator .
- Cuba is called sugar bowl of the world .
- The list top 10 sugar producing countries of the world as per latest report of the united nations food and agricultural organization.

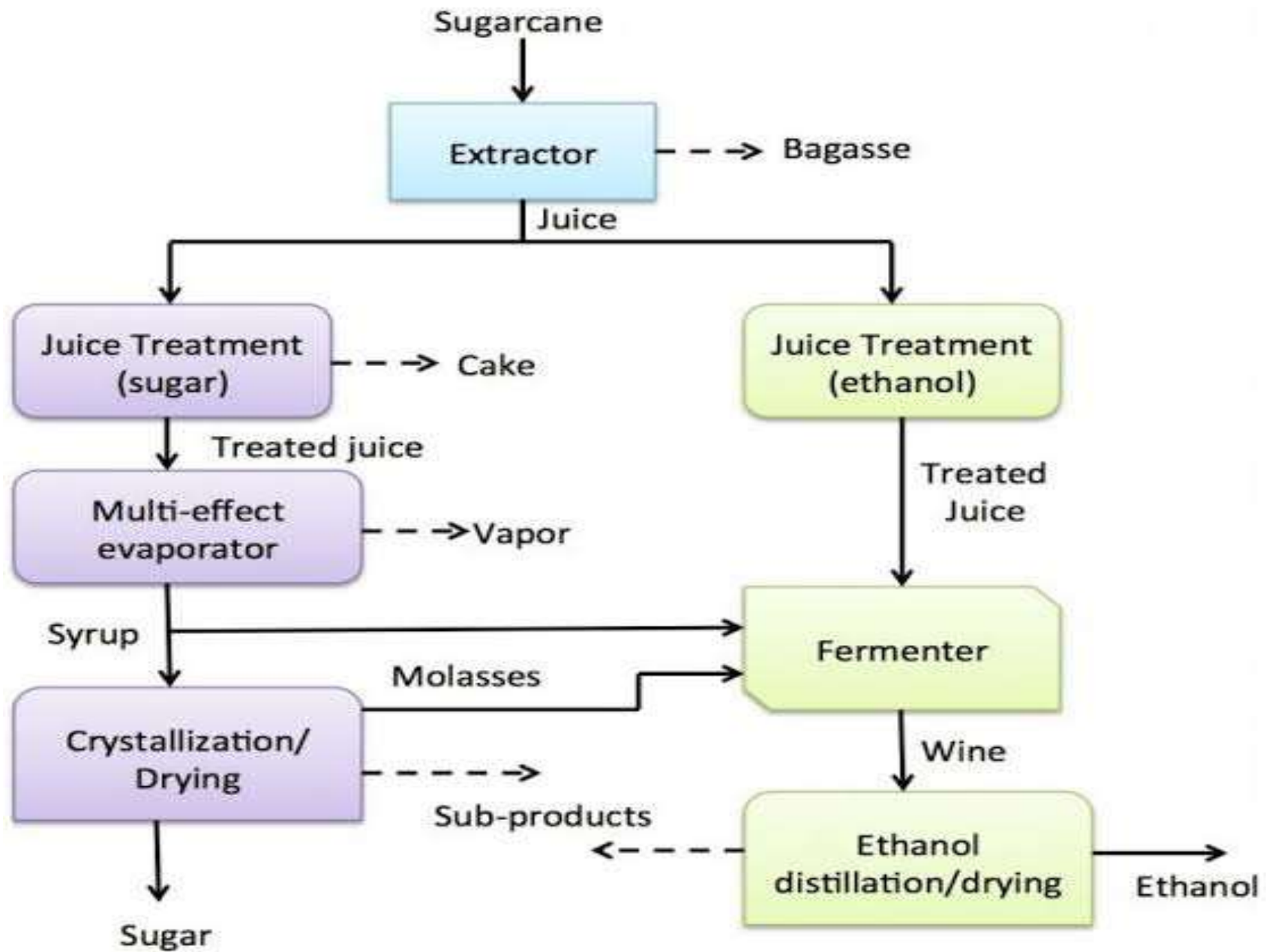
Country	Production		Area		Yield	
	Million Mg	Rank	×1000 ha	Rank	Mg ha ⁻¹	Rank
Brazil	739.27	1	9835.2	1	75.17	29
India	341.20	2	5060.0	2	67.43	40
China	126.14	3	1827.3	3	69.03	39
Thailand	100.10	4	1321.6	4	75.74	26
Pakistan	63.75	5	1128.8	5	56.48	51
Mexico	61.18	6	782.8	6	78.16	25
Colombia	34.88	7	405.7	9	85.95	19
Indonesia	33.70	8	450.0	7	74.89	31
Philippines	32.00	9	435.4	8	73.49	37
USA	27.91	10	368.6	11	75.71	27
World total	2165.23		26522.7		81.64	

Source: FAO of the United Nations, FAOSTAT, and Factfish [13, 14].

- In India more than four million acres of land are under sugarcane cultivation .
- The Indian institute of sugarcane research (IISR) situated in Lucknow .

CULTIVATION OF SUGARCANE

- In general, sugarcane is propagated by cuttings of varying lengths made from the upper joints of old canes .
- The cuttings are planted either in furrows or in trenches at distance varying from 0.5-1.5 meters .
- Cane is harvested from 10-15 months .
- Harvested cane is brought to factories for extraction of sugar .



USES OF SUGARCANE :

- Sugarcane juice is rich in calcium , cobalt, potassium & vitamin A ,B,C .
- The fibrous residue of cane is called bagasses .
- Molasses along with cane juice and other by-products can be fermented & then distilled to produce an alcoholic distillate known as RUM .
- When combined with other ingredients including lime , sugarcane can be used to create an organic fertilizers & soil improver .

THANK YOU