Co 11015 (Atulya)

Parentage:	CoC 671 x Co 86011
Maturity:	8-12 months
Adaptability Zone :	Peninsular Zone
Cane yield:	135.70 t/ha
Sugar yield:	20.09 t/ha
Details of the variety:	Co 11015 is evolved from the cross CoC 671 and Co 86011 at ICAR- Sugarcane Breeding Institute, Coimbatore. The clone showed a remarkably good performance in the clonal trials with clear superiority over the standards Co 86032 and CoC 671. In station trials, it recorded a cane yield of 135.70 t ha-1, sucrose % of 21.46 % and sugar yield of 20.09 t ha-1 at 360 days. The variety was tested in ten locations (6 zones) of Tamil Nadu during 2017-2019 for two plant and one ratoon crops along with 19 other

	entries and standards and emerged as the best entry combining high yield and juice quality. Overall mean performance of the clone was 142.72 t ha-1 of cane yield, 20.22 % of sucrose and 20.16 t ha-1 of sugar yield (Table 1). The per cent increase over the standard Co 86032 for cane yield, sucrose % and sugar yield were 10.23, 9.66 and 20.13 respectively. This is a consistent high yielding and high quality clone under varied agro-climatic conditions across Tamil Nadu indicating wider adaptability and stability in yield and quality performance. Co 11015 is a good ratooner and registered an increase of 18.57 % for sugar yield, 9.61% for cane yield, and 8.62% for sucrose content over the check Co 86032. This variety behaves as a short duration maturing clone with >17 % sucrose at 240 days to substantially improve the sugar recovery during the early crushing period as well as can fit well in realizing three crops in two years in regions with water scarcity. Further, as the juice quality improves upto 12 months, Co 1105 can be harvested from 8 to 12 months. Its suitability for special season planting and harvest (during July) was evaluated in plant and ratoon crops that showed an improvement of 8.98%, 6.93% and 9.15% in sucrose over the popular variety Co 86032 at 240, 300 and 360 days respectively.
Special features:	a consistent high and stable yield • quality performance over locations of Tamil Nadu • early sugar accumulation • high early sugar accumulating potential • resistant (nodal method) to prevalent pathotypes / races of red rot • moderately susceptible

	(plug method) to prevalent pathotypes / races of red rot • tolerant to drought conditions
Morphological identification characters	It has tall, semi erect, medium thick, light purple wax coated canes with long internodes, prominent corky patches, green growth ring and light greenish brown dewlap. The canopy is light and open with tip droopy to curved broad medium long leaves with self-stripping nature. The bud groove is indicated, buds are small to medium in size and oval in shape. Leaf sheath is light green with very few spines and transitional ligular process.