



ABBREVIATIONS AND ACRONYMS

ABB	Asia Brown Boveri	CAW	'C' After Worker
ACB	Air Circuit Breaker	CCS	Commercial Cane Sugar
ACFC	Auto Cane Feed Control	CD	Compact Disc
AGC	Activated Granular Carbon	CDM	Clean Development Mechanism
AGRESCO	Agriculture Science Congress	cDNA	Complement Deoxy Ribo Nucleic Acid
a.i./ha	Active Ingredient per hectare	CDO	Cane Development Officer
AICRP	All India Coordinated Research Project	CEP	Condensate Extraction Pump
AICRP(S)	All India Coordinated Research Project (Sugarcane)	CESE	Centre for Environmental Science and Engineering
AIDA	All India Distillers' Association	CFD	Computerized Fluid Dynamics
ALB	<i>Azotobacter</i> Liquid Bio-inoculant	CFTRI	Central Food Technology Research Institute
A/M	Auto Manual	CHNS	Carbon Hydrogen Nitrogen Sulphur
ANGRU	Acharya N.G. Ranga University	ChTI	<i>Coccolous hirsutus</i> Tripsin Inhibitor
AO	Agriculture Officer	CIPET	Central Institute of Plastic Engineering Technology
APFC	Automatic Power Factor Controller	CJ	Clear Juice
APLB	Azo-Phospho Liquide Bioinoculant	CL	Country Liquor
AP-PCR	Arbitrarily Primed Polymerase Chain Reaction	cm	Centimeter
APR	Abridged Project Report	Co	Bred and selected by SBI Coimbatore
ARS	Agriculture Research Station	CoC	Bred in Coimbatore and selected in Cuddalore
ASSCT	Australian Society of Sugar Cane Technologists	COD	Chemical Oxygen Demand
ata	Atmospheric absolute	CoJN	Bred in Coimbatore and selected in Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (MP)
AtNDPK2	At Nucleotide Di Phosphate Kinase 2	CoM	Bred in Coimbatore and selected in Maharashtra
AVT	Advanced Varietal Trial	CoSnK	Bred in Coimbatore and selected in Sankeshwar (Karnataka)
BAMU	Babasaheb Ambedkar Marathwada University	CoT	Bred in Coimbatore and selected in Tirupathi (AP)
BARC	Bhabha Atomic Research Center	CoTI	Bred in Coimbatore and selected in Thiruvalla (Kerala)
BASL	Bannari Aman Sugar Ltd.	CoVC	Bred in Coimbatore and selected in Visvarayya
BCIL	Biotechnology Consortium India Ltd.	CPCB	Central Pollution Control Board
B:C	Benefit Cost Ratio	CPE	Continuous Pan Evaporation
BFW	'B' Fore Worker/Boiler Feed Water	CREP	Corporate Responsibility for Environmental Protection
BHP	Break Horse Power	CSRS	Central Sugarcane Research Station
BIPM	Bio Intensive Pest Management	CT	Current Transformer
BIS	Bureau of Indian Standards	CV	Coefficient of Variation
BOD	Biological Oxygen Demand	DAM	Distillers' Association of Maharashtra
BOOT	Build Own Operate and Transfer	DAP	Di Ammonium Phosphate
BOS	Board of Studies	DAR	Days After Release
BP	Back Pressure		
Bt	<i>Bacillus thuringensis</i>		
BV	Bed Volume		
CAB	Commonwealth Agriculture Bureau		
CADCAM	Computer Aided Design Computer Aided Machine		
CATAS	Academy of Tropical Agriculture Sciences		

Annexure 12 (Contd.)

ABBREVIATIONS AND ACRONYMS

DARI	Days After Ratoon Initiation	FFE	Falling Film Evaporator
DAS	Days After Spraying	FIM	Farm Implement & Machinery
DAT	Days After Treatment	FLD	Front Line Demonstration
DBT	Department of Biotechnology	FTF	Fructosyl Transfere
DC	Direct Current / Dithiocarbamate	FVT	Final Varietal Trial
DCS	Distributed Control System	FW	Feed Water
DDGS	Dried Distillers Grain Soluble	FYM	Farm Yard Manure
DEC	Double Extraction Condensing	GA	General Arrangement
DECT	Double Extraction Condensing Turbine	GC	Gas Chromatography/General Collection
DEVC	Double Effect Vapour Cell	GHH	Gute Hoffnungs Hutte
DIEG	Drying Incineration and Energy Generation	gm	Gramme
DIFAT	Diploma Course in Industrial Fermentation and Alcohol Technology	GS	General Subject
DM	Demineralized	GSD	Grassy Shoot Disease
DNA	Deoxyribo Nucleic Acid	HL	Hecto Litre
DNSA	Di Nitro Salicylic Acid	HP	Horse Power
DPR	Detailed Project Report	HPLC	High Performance Liquid Chromatography
DSCL	DCM Shriram Consolidated Limited	HPTLC	High Performance Thin Layer Chromatography
DSLCL	Digital Synchronization Load Controller	HR	Hand Refractometer
DSM	Dhampur Sugar Mill	HRD	Human Resource Development
DSTA	Deccan Sugar Technologists Association	HRP	Horse Radish Protein
DTPA	Diethylene Triamine Penta Acetic Acid	HS	Heating Surface/Highly Susceptible
DWS	Derated Water Storage	HT	High Tension
EB	Evaporator Body	IAA	Indol 3 Acetic Acid
EC	Electrical Conductivity	IARI	Indian Agriculture Research Institute
EIA	Environmental Impact Assessment	IASLIC	Indian Association of Special Libraries and Informaion Centre
ELISA	Enzyme Linked Immuno Sorbent Assay	IC	Integrated Circuit
EOT	Electrically Operated Overhead Traveling Crane	ICAR	Indian Council of Agricultural Research
ENA	Extra Neutral Alcohol	ICBR	Incremental Benefit Ratio
EQENA	Export Quality Extra Neutral Alcohol	ICGEB	International Center for Genetic Engineering and Biotechnology
ERP	Enterprise Resource Planning	ICSB	International Consortium of Sugarcane Biotechnology
ESB	Early Shoot Borer	ICUMSA	International Commission on Uniform Methods for Sugar Analysis
EST	Expressed Sequence Tag	ID	Induced Draft
ETP	Effluent Treatment Plant	IDM	Integrated Disease Management
f	Frequency	IEC	International Electro-technical Commission
FAD	Food and Agriculture Department	IEEE	Institute of Electrical Electronics Engineering
FAT	Factory Acceptance Test / Fermentation & Alcohol Technology		
FBC	Fluidized Bed Combustion		
FD	Forced Draft		



Annexure 12 (Contd.)

ABBREVIATIONS AND ACRONYMS

IGL	Indian Glycol Ltd.	LP	Low Pressure
IISR	Indian Institute of Sugarcane Research	LPE	Low Pressuer Extraction
IMARS	International Millard Reaction Society	LT	Low Tension
IMD	Indian Meteorological Department	LTRF	Long Tube Rising Film
IMFL	Indian Made Foreign Liquor	m	Meter
IOS	International Organization for Standardisation	M	Medium
I/P	Current to pressure	MA	Mean Aperture
IPI	International Potash Institute	MACS	Maharashtra Association for Cultivation of Science
IPL	I Plant	MALDI-TOF	Matrix Assisted Lazer Desorption Ionization - Time of Flight - Spectrometry
IPM	Integrated Pest Management	MAS	Marker Aided Selection
IPR	Intellectual Property Right	MCC	Motor Control Centre
IR	I Ratoon	MCCIA	Maratha Chamber of Commerce Industry & Agriculture
IS	Impure Spirit	MDC	Multicyclone Dust Collector
ISH	Inter Specific Hybrid	MEDA	Maharashtra Energy Development Agency
ISMA	Indian Sugar Mills Association	MEDC	Maharashtra Economic Development Council
ISO	International Sugar Organization	mg	Miligramme
ISP	Impure Spirit Purification	MIBK	Methyl Iso Butyl Ketone
ISSCT	International Society of Sugar Cane Technologists	MIS	Management Information System
ITBB	Institute of Tropical Biosciences and Biotechnology	MJ	Mixed Juice
ITPO	India Trade Promotion Organisation	ML	Mid-late
IU	ICUMSA Unit	MLO	Mycoplasma Like Organisms
IVT	Initial Varietal Trial	MLT	Multi-location Trials
IWFC	Imbibition Water Flow Control	mM	Milli Molar
JH	Juice Heater	MM	Multimacronutrient/Multimicronutrient
KEC	Kirloskar Electric Company	MNES	Ministry of Non-conventional Energy Sources
KESREF	Kenya Sugar Research Foundation	MNLF	Micronutrient Liquid Fertilizer
Kg/ha	Kilogram per hectare	MNRE	Ministry of New & Renewable Energy
KLPD	Kilo Litres Per Day	MOL	Milk of Lime
KUKSM	Khand Udyog Khedut Sahakari Mandali	MoEF	Ministry of Environment and Forests
KUSM	Khand Udyog Sahakari Mandali	MoP	Muriate of Potash
KVA	Kilo Volt Ampere	MP	Madhya Pradesh/Mother Plant
KVAR	Kilo Volt Ampere Reactive	MPCB	Maharashtra Pollution Control Board
KWH	Kilo Watt Hours	MPKV	Mahatma Phule KrishiVidyapeeth
L	Large	MRSSK	Maharashtra Rajya Sahakari Sakhar Karkhana
LA	Lactic Acid	MRT	Mean Residence Time
LAN	Local Area Network	MS	Maharashtra State/Moderately Susceptible
LB	Luria Broth		
LCA	Life Cycle Assessment or Analysis		
LE	Larval Equivalent		
LI	Lift Irrigation		
lit	Litre		

Annexure 12 (Contd.)

ABBREVIATIONS AND ACRONYMS

MSEDCL	Maharashtra State Electricity Distribution Company Limited	PFVT	Pre-Final Varietal Trial
MSLC	Master Synchronization Load Controller	Ph.D	Doctor of Philosophy
MSRTC	Maharashtra State Road Transport Corporation	PID	Proportional Integral and Derivative
MVA	Mega Volt Ampere	PJ	Primary Juice
MW	Mega Watt	PLC	Programmable Logic Controller
µg	Micro Gramme	POBs	Polyhydra Occlusion Bodies
µM	Micro Molar	PP	Potassium Permanganate
NABARD	National Bank for Agricultural & Rural Development	PRD	Pressure Reducing Desuperheater
NABL	National Accreditation Board for Laboratories	PRDS	Pressure Reducing and Desuperheating Station
NATP	National Agricultural Technology Project	PRV	Pressure Reducing Valve
NCBI	National Centre for Biotechnological Information	PSB	Phosphorus Solubilizing Bacteria
NCDC	National Cooperative Development Corporation	PSPQC	PQ Systems softwares and Statistical Process Control
NCG	Non Condensable Gases	PT	Potential Transformer
NCL	National Chemical Laboratory	PTO	Power Take Off
NEERI	National Environmental Engineering Research Institute	PVC	Poly Venyl Chloride
NFCFSF	National Federation of Co-operative Sugar Factories	QAC	Quaternary Ammonium Compound
NHEC	National Heavy Engineering Co-operative	qtl/ha	Quintal per Hectare
NMC	Number of Millable Canes	R & D	Research and Development
NPK	Nitrogen Phosphorus Potash	RACE-PCR	Random Amplification of cDNA Ends
NRCPB	National Research Centre for Plant Biotechnology	RAPD	Randomly Amplified Polymorphic DNA
NSDA	National Soft Drinks Association	RBC	Return Bagasse Carrier
OC	Organic Carbon	RBHR	Reduced Boiling House Recovery
OPA	Operon Primer A	RBU	Reference Basic Unit
P&I	Process & Instrumentation	RDF	Recommeded Dose of Fertilizers
pCAMBIA	Cambia Plasmid	RFLP	Restriction Fragment Length Polymorphism
PCC	Power Control Centre	RGSI	Raingun Sprinkler Irrigation
PCR	Polymerase Chain Reaction	RH	Relative Humidity
PE	Primary Extraction	RJ	Raw Juice
pET	Bacterial Expression Vector	RLB	<i>Rhizobium</i> Liquid Bio-inoculant
pf	Power Factor	RME	Reduced Mill Extraction
pH	Hydrogen Ion concentration	RO	Reverse Osmosis
PHB	Poly Hydroxy Butarate	ROE	Reduced Overall Extraction
PF	Pressure Feeder / Pre Fermenter	RPLB	Rhizo Phospho Liquid Bio-inoculant
		RRC	Research Review Committee
		rRNA	Ribosomal Ribo Nucleic Acid
		RS	Rectified Spirit / Reducing Sugar
		RS & JRS	Regional Sugarcane & Jaggary Research Station
		RTD	Residence Time Distribution
		RT-PCR	Reverse Transcriptase
		S	Small/Susceptible



Annexure 12 (Contd.)

ABBREVIATIONS AND ACRONYMS

SA	Secondary Air	SUPA	Steiner's Universal Philosophia Agrica
SB	Sulphur Burner	SWA	Sugarcane Woolly Aphid
SBC	Sugarcane Breeding Center	SWAS	Steam and Water Analysis System
SBI	Sugarcane Breeding Institute	TA	Titrateable Acidity
SC	Suspendable Concentration	TBD	Tonnes of Beet per Day
SCGS	Sugarcane Grassy Shoot	TBH	Tonnes of Beet per Hour
SDCW	Shamli Distillery & Chemical Works	TC	Tissue Culture
SDF	Sugar Development Fund	TCD	Tonnes of Cane per Day
SDS	Special Denatured Spirit	TCH	Tonnes Cane Crushed per Hour
SDS-PAGE	Sodium Dodile Sulphate-Poly Acrylamid Gel Electrophoresis	TDS	Total Dissolved Solids
SEC	Sugar Engineering Certificate	TERI	Tata Energy and Resoruces Institute
secA	Subunit of Secretary Membrane Protein	TG	Turbo Generator
SED	Sugar Engineering Diploma	t/ha	Tonnes per Hectare
SF6	Sulphur Hexa Fluoride	THD	Total Harmonic Distortion
SISSTA	South Indian Sugar and Sugarcane Technologists Association	ToF	Training of Facilitators
SIT	Sugar Industry Technologists Inc.	TN	Tamil Nadu
SJ	Sulphured Juice	TPH	Tonnes Per Hour
SK	Semi Kestner	TRPF	Tooth Roller Pressure Feeder
SNPV	<i>Spodoptera litura</i> Nuclear Polyhydrosis Virus	TRS	Total Reducing Sugar
SKUM	Sahakari Khand Udyog Mandali	UFR	Under Feed Roller
SL	<i>Spodoptera</i> Larvae	UFS	Unfermentable Sugar
SLMPC	State Level Machinery Purchase Committee	UP	Uttar Pradesh
SOCL	Somayya Organic Chemicals Ltd.	UK	United Kingdom
SOM	Sulphur Oxidising Microorganisms	UV	Ultra Violet
SOP	Sulphate of Potash	V	Voltage
SP	Sanex P	VAAIL	Viraj Alcohols and Allied Industries Limited
SRS	Sugarcane Research Station	VCB	Vacuum Circuit Breaker
SRSL	Shree Renuka Sugar Ltd.	v/f	voltage / frequency
SS	Stainless Steel / Sweet Sorghum	VFD	Variable Frequency Drive
SSH	Substrate Subtraction Hybridization	VHP	Very High Pol
SSK	Sahakari Sakhar Karkhana (Cooperative Sugar Factory)	VHPRS	Very High Pol Raw Sugar
SSM	Silicon Solubilizing Micro-organisms	VLJH	Vapour Line Juice Heater
SSNM	Site Specific Nutrient Management	VNSSKL	Vishwasrao Naik Sahakhari Sakhar Karkhana Ltd.
SSR	Simple Sequence Repeats	VSI	Vasantdada Sugar Institute
STAI	Sugar Technologists Association of India	VSKUM	Vibhag Sahakari Khand Udyog Mandali
STCR	Soil Test Crop Response	WC	Water Cooled
STM	Sugar Technology Mission	WF	White Fly
		WIL	Walchandnagar Industries Ltd.
		WSRO	World Sugar Research Organization
		w/v	Weight by Volume
		ZVT	Zonal Varietal Trial