



COTS

Sathguru Management Consultants Pvt. Ltd.

Plot No:54, Sagar Society, Road 2, Banjara Hills-34

Hyderabad, INDIA

www.sathguru.com



Computerized Operation Tracing System

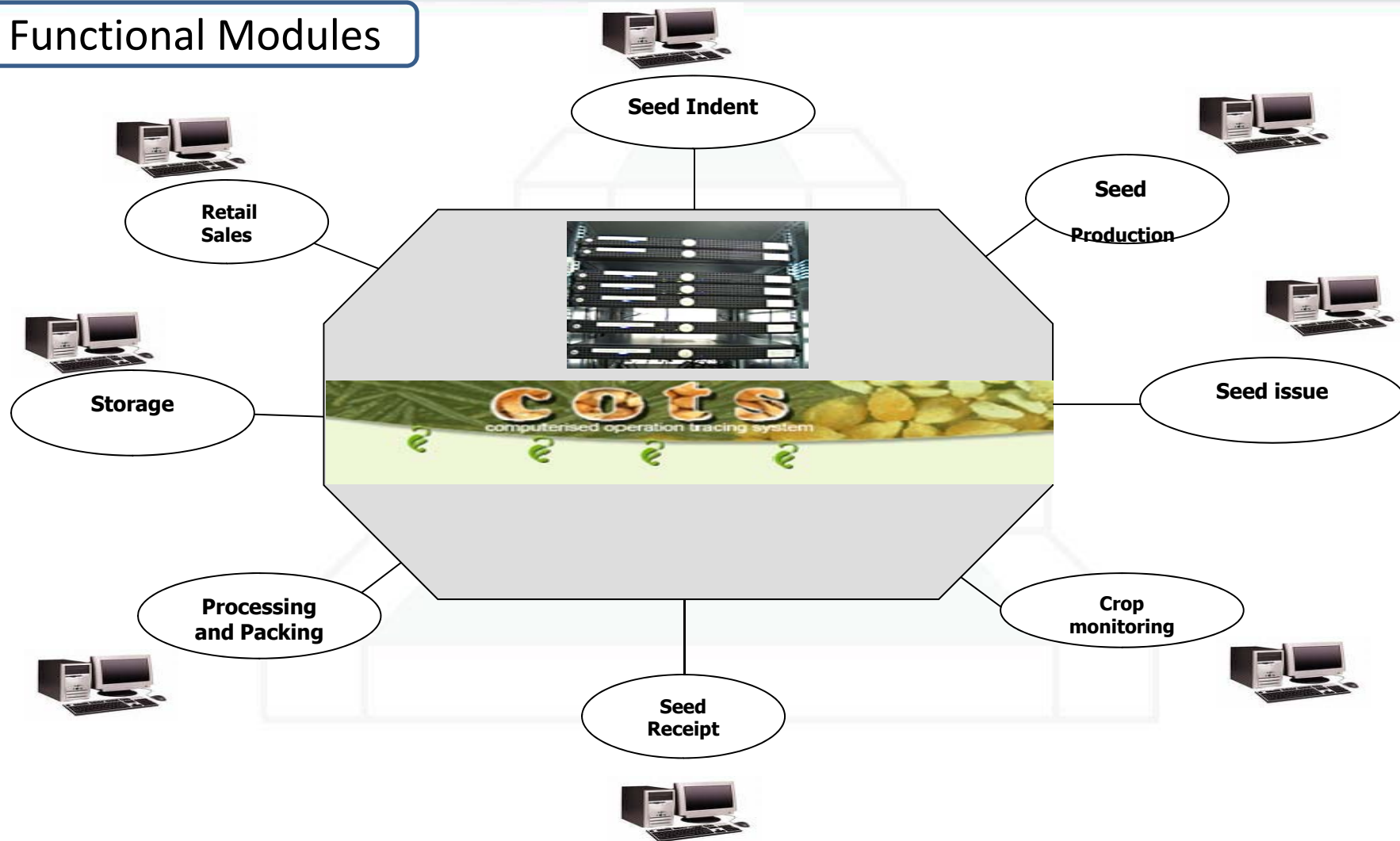
COTS is a unique, web-based comprehensive package exclusively designed for seed processing industries. COTS application includes feature-rich modules that cater to most of the needs of any seed company such as demand forecasting, seed production, processing and distribution.

COTS essentially works as a centralized Information repository for all functions and departments, thus ensuring management accuracy in tracking Production and delivery of seed varieties, hybrids and transgenic seeds.

COTS application effectively mines the data and helps organizations to generate reports for regulatory compliance, demand forecast and Inventory tracking will help management to take productive decisions, resulting in a "Better corporate Image".



Functional Modules



Features and Highlights

Processing:

- Seed receipt
- Quality parameter testing
- Seed grower payments

Production:

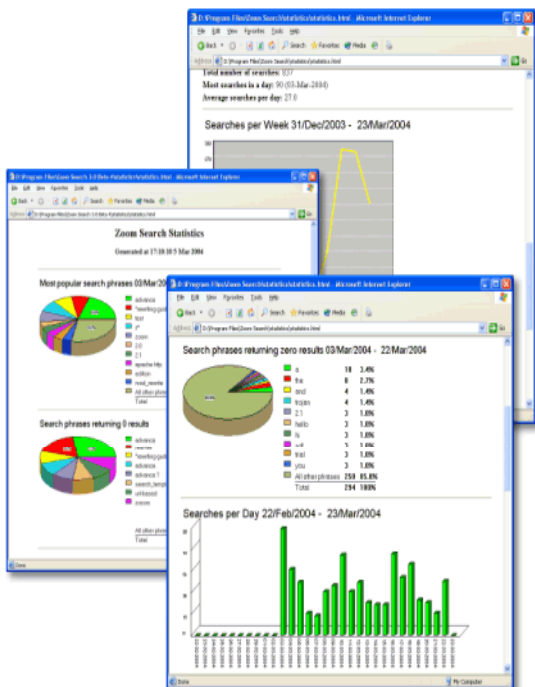
- Indent details raised on different criteria through multiple resources.
- Indent wise production plan.
- Resource allocation to meet production plan to various production centers.
- Material distribution and result monitoring
- Crop monitoring

Distribution:

- Indent wise bill generation
- Retail sales receipt
- Seeds accounting for loss/gain for natural disaster.



Reports



- ✓ Generates statutory and non-statutory reports
- ✓ Equipped with standard report formats for the Industry
- ✓ Indent List
- ✓ Indent wise production plan
- ✓ Seed monitoring report
- ✓ Seed Analysis report
- ✓ Day book for seed issue
- ✓ Day book for seed receipt
- ✓ Seed receipt
- ✓ Production plan details
- ✓ Seed production program
- ✓ Seed distribution
- ✓ Packing stock
- ✓ Raw stock



Crop Variety

Crop Variety Master

Select Crop Group : ▼

Select Crop : ▼

Add Variety / Hybrid

Variety Code	Variety Desc.	Type	IsActive	Default Uom	Report Uom	Conversion Factor	Edit	Delete
Kudachilocal	Kudachi Local	Variety	Y	g	g	1	Edit	Delete
Malabar local	Malabar local	Variety	Y	g	g	1	Edit	Delete
Udupigolla	Udupi Golla	Variety	Y	g	g	1	Edit	Delete
<input type="text"/>	<input type="text"/>	Variety ▼	Yes ▼	% ▼	% ▼	<input type="text"/>	Insert	

- ✓ Entries for the crop group , crop and variety of crop with details.



Crop Parameters

Crop Parameter

At Receipt
 At Processing
 Crop Bt_Brinjal - Bt_Brinja
 Variety Kudachilocal - K

	Param Code	Parameter	Type	High Range	Low Range	Uom
<input type="checkbox"/>	Genetpurity	Genetic purity	Q	0	0	%
<input checked="" type="checkbox"/>	Germin	Germination	Q	100	95	%
<input type="checkbox"/>	Inert	Inert Matter	Q	0	0	%
<input type="checkbox"/>	Insect	Insect infested seed	Q	0	0	%
<input checked="" type="checkbox"/>	Moisture	Moisture	Q	100	94	%
<input type="checkbox"/>	Other	Other Crop Seed	Q	0	0	%
<input type="checkbox"/>	PhyPurity	Physical Purity	Q	0	0	%
<input type="checkbox"/>	PureSeed	Pure Seed	Q	0	0	%
<input type="checkbox"/>	SeedHealth	Seed Health	Q	0	0	%
<input type="checkbox"/>	weed	Weed seed	Q	0	0	%

Save

- ✓ At Receipt is for seed receipt to know the status of seed quality at the time of accepting the seed.
- ✓ At Processing is for quality testing of seed stock.



Crop Monitoring Parameters

Crop Monitoring Parameters

Crop Type : Bt_Brinjal - Bt_Brinja ▼

Stage I - 15 DAT	Stage II - 30 DAT	Stage III - 45 DAT	Stage IV - 60 DAT	General
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Parameter Code	Parameter Desc	Value	Edit	Delete
11	Gene expression test	10	Edit	X
12	Insect Population monitoring	44	Edit	X
13	Baseline suceptibility monitoring	55	Edit	X
14	Event Purity Test	33	Edit	X
			Insert	

Clear
Save

Monitoring parameters

- ✓ Stage levels (I,II,III,IV) for GM crops.
- ✓ General stage for non-GM crops.



Indent

INDENT

Indent code	<input type="text" value="385"/>	Indent Date (dd/mm/yyyy)	<input type="text" value="16/9/2010"/>
Class of Seed	<input type="text" value="Nucleus"/>	Delivery Before (dd/mm/yyyy)	<input type="text" value="01/09/2011"/>
Indent Type	<input type="text" value="External"/>		
Indent Source	<input type="text" value="Department of agriculture"/>	Party/Agency	<input type="text" value="Biotechnology Departm"/>
Reference No.	<input type="text" value="DOA/Bio/BT"/>	Indent Organisation	<input type="text" value="BIO-TECH"/>
Authority	<input type="text" value="Mr.Murthy"/>	Advance	<input type="text" value="100000"/> <input type="text" value="INR"/>

INDENT DETAILS

Crop Code	<input type="text" value="Bt_Brinjal"/>	Crop Name	<input type="text" value="Bt_Brinjal"/>
Variety	<input type="text" value="Malapurlocal"/>	Variety Desc.	<input type="text" value="Malapur Local"/>
Class Of Seed	<input type="text" value="Nucleus"/>	Season	<input type="text" value="Kharif- 2010 - Kharif 2"/>
Indent Qty	<input type="text" value="500"/> <input type="text" value="Kg"/>	Target Qty	<input type="text" value="600"/> <input type="text" value="Kg"/>
Production Year	<input type="text" value="2010 - 2010"/>	Is Final Cycle	<input type="text" value="Y"/> <input type="button" value="Insert"/>

Previous Next

Edit	Delete	S.No.	Class Of Seed	Crop	Variety	Season	Indente
Edit	X	1	Nucleus	Bt_Brinjal	Kudachilocal	Kharif- 2010 - Kharif 2010	5000

✓ Indent is the demand from the various agencies with respect to the class of seed, crop and variety.



Production Plan

PRODUCTION PLAN

Production PLAN Id <input style="width: 80%;" type="text" value="8"/>	Production Plan Date (mm/dd/yyyy) <input style="width: 80%;" type="text" value="02/05/2008"/>
Prod. Plan Year <input style="width: 80%;" type="text" value="2008 - 2008"/>	Prod. Plan By <input style="width: 80%;" type="text" value="SEEDUNIT - SEED"/>
Crop Name <input style="width: 80%;" type="text" value="Bt_Brinjal - Bt_Br"/>	Variety <input style="width: 80%;" type="text" value="Udupigolla - Udupi"/>
Class Of Seed <input style="width: 80%;" type="text" value="Nucleus"/>	Season <input style="width: 80%;" type="text" value="Kharif - Kharif"/>
Prod. Incharge <input style="width: 80%;" type="text" value="Sr. Bt_Brinjal Breeder"/>	Remarks <input style="width: 80%;" type="text" value="nil"/>

INDENT DETAILS

Indent ID <input style="width: 80%;" type="text" value="7"/>	Indent Source <input style="width: 80%;" type="text" value="Department of"/>
Indented Qty <input style="width: 80%;" type="text" value="1000"/>	Planned Qty <input style="width: 80%;" type="text" value="1200"/>
Reference No. <input style="width: 80%;" type="text" value="ref/bt/brinj/udu"/>	<input type="button" value="Insert"/>

	Previous	Next	Delete	S.No.	Indent Id	Source Name	Ref No	Indented Qty.	Planned Qty.
<input checked="" type="checkbox"/>			X	1	7	Department of agriculture	ref/bt/brinj/udu	1000 g	1200 g

Sum of Planned Qty. 1200
 Available Balance Qty. 0
 Targetted Qty. 1200

PRODUCTION PLAN DETAILS

Station <input style="width: 80%;" type="text" value="SEEDUNIT - SEED UP"/>	Targetted Qty <input style="width: 80%;" type="text" value="100"/>
Supervisor <input style="width: 80%;" type="text" value="breeder"/>	<input type="button" value="Insert"/>

	Previous	Next	Delete	S.No.	Station	Targetted Qty.	UOM	Member
<input checked="" type="checkbox"/>			X	1	SEEDUNIT - SEED UNIT	1200	g	breeder

Targetted Qty. 1200

✓ Plan made for consolidated indents with respect to class of seed, crop, variety and season.



Production Allocation

Production Allocation														
Allocation Id	<input type="text" value="8"/> *	Allocation Date (mm/dd/yyyy)	<input type="text" value="02/06/2008"/> *											
Station	<input type="text" value="SEEDUNIT - SEED U"/> *	Production Plan ID	<input type="text" value="8"/> *											
Production Plan Details														
Crop	<input type="text" value="Bt_Brinjal"/>	Variety	<input type="text" value="Udupigolla"/>											
Class Of Seed	<input type="text" value="Nucleus"/>	Season	<input type="text" value="Kharif"/>											
Year	<input type="text" value="2008 - 2008"/>	Targeted Quantity	<input type="text" value="1200g"/>											
FARMING DETAILS														
Farming Type	<input type="text" value="Farm"/> *	Farm Code	<input type="text" value="grower_I - name growe"/>											
Village Code	<input type="text" value="vill_01"/>	Village Name	<input type="text" value="Village Name I"/>											
Area	<input type="text" value="5"/> <input type="text" value="acre"/>	Plot No.	<input type="text"/>											
Date of Sowing (mm/dd/yyyy)	<input type="text" value="02/08/2008"/>	Monitoring Date	<input type="text" value="02/21/2008"/>											
Exp.Date Of Harvest (mm/dd/yyyy)	<input type="text" value="07/14/2008"/>	Production Incharge	<input type="text" value="breeder"/>											
Expected Production	<input type="text" value="1500"/> <input type="text" value="g"/>	Remarks	<input type="text" value="nil"/>											
<input type="button" value="Insert"/>														
<table border="1"> <thead> <tr> <th>Previous</th> <th>Next</th> </tr> </thead> <tbody> <tr> <td>Delete</td> <td>S.No.</td> <td>Farm Type</td> <td>Grower</td> <td>Village</td> <td>Area</td> <td>Expected Yield</td> <td>PlotNo.</td> <td>Exp.Date Of Sowi</td> </tr> </tbody> </table>				Previous	Next	Delete	S.No.	Farm Type	Grower	Village	Area	Expected Yield	PlotNo.	Exp.Date Of Sowi
Previous	Next													
Delete	S.No.	Farm Type	Grower	Village	Area	Expected Yield	PlotNo.	Exp.Date Of Sowi						
<input type="button" value="Clear"/> <input type="button" value="Save"/> <input type="button" value="View"/>														

✓ Allocation of seed for seed multiplication to external/ internal growers.



Seed Issue

SEED ISSUE			
Issue Number	<input type="text" value="3"/> *	Date(dd/mm/yyyy)	<input type="text" value="12/5/2009"/> 
Station	<input type="text" value="SEEDUNIT - SEED UP"/> *	Class Of Seed	<input type="text" value="Breeder"/>
Crop Name	<input type="text" value="Wheat - Wheat"/>	Variety	<input type="text" value="B.YELLOW - BIJGA YEL"/>
Farming Type	<input type="text" value="Farmer"/>	Farm/Farmer Code	<input type="text" value="Ar102 - C.S. Marol"/>
Village	<input type="text" value="Aralikatti"/>	Plan ID	<input type="text" value="2"/>
Issuing authority	<input type="text"/>	Remarks	<input type="text"/>

ISSUE DETAILS			
Lot No.	<input type="text" value="Lot/wheat/B.Y"/>	Packing Code	<input type="text" value="bag_03"/>
Size / Capacity	<input type="text" value="30"/> Kg	No.Of Pack(s) Available	<input type="text" value="10"/>
No Of Pack(s) Issued	<input type="text" value="5"/>	Issued Qty	<input type="text" value="150"/> Kg
Rate	<input type="text" value="6000"/> <input type="text" value="INR"/>	Concerned Auth. Person	<input type="text" value="Seeds Officer"/>
Deposit Amount	<input type="text" value="5000"/>	<input type="button" value="Insert"/>	

Previous		Next	
delete	S.No.	Class Of Seed	Crop Variety LotNo Packing Code Size / Capacity UOM No Of Packs Qty.

✓ Quality of seeds issued to growers for multiplication of seeds.



Stewardship/Crop Monitoring

Stewardship / Crop Monitoring

Financial Year	2010 - 2011 *	Monitor code	1 *
Station	SEEDUNIT - SEED UNIT	Class of Seed	Nucleus
Crop	Bt_Brinjal - Bt_Brinjal	Variety	GO112 - GO 112 *
Plan code	352	Field Location	Dharwad
Sub Division	Dharwad *	Area	50 acre
Date of Transplantation (dd/mm/yyyy)	02/09/2010 *	Expected Yield	300 Kg
<input checked="" type="checkbox"/> Is Passed			

Crop Monitoring Detail

Stage I - 15 DAT	Stage II - 30 DAT	Stage III - 45 DAT	Stage IV - 60 DAT	General	
Monitor		Monitor Date (mm/dd/yyyy)			
Mr.Ram mohan		16/09/2010			
Parameter Code	Parameter Desc	Value	Ob Value	Crop Condition	Remarks
1	Gene Expression Test	3	2	Medium	
2	Insect Population monitoring	12	10	Medium	
3	Event Purity Test	20	20	Good	

- ✓ Based on predefined stages, stewardship monitoring is facilitated in order to maintain quality.
- ✓ Completion of the monitoring stages leads to the next process.



Seed Receipt

SEED RECEIPT

Receipt Number	<input type="text" value="13"/> *	Received by	<input type="text" value="Seeds Officer"/>
Receipt Date (mm/dd/yyyy)	<input type="text" value="07/24/2008"/>	Station	<input type="text" value="SEEDUNIT - SEED UNI"/> *
Crop	<input type="text" value="Bt_Brinjal - Bt_Brinjal"/>	Variety	<input type="text" value="Udupigolla - Udupi Go"/>
Class of Seed	<input type="text" value="Nucleus"/>	Farming Type	<input type="text" value="Farm"/>
Farm	<input type="text" value="grower_I - name grower"/>	Village Code	<input type="text" value="vill_01"/>
Village Name	<input type="text" value="Village Name I"/>	Production Plan Id	<input type="text" value="8"/>
Remarks	<input type="text" value="nil"/>		

Previous	Next				
Param Code	Parameter	High Range	Low Range	Ob Reading	UOM
Genetpurity	Genetic purity	100	99	<input type="text" value="99"/>	%
Germin	Germination	100	95	<input type="text" value="96"/>	%
Moisture	Moisture	8	4	<input type="text" value="5"/>	%

Is Passed	<input type="text" value="Yes"/>	Received Qty	<input type="text" value="1300"/> g
Blown of waste	<input type="text" value="50"/> g	Rejected Quantity	<input type="text" value="500"/> g
Accepted Qty	<input type="text" value="750"/> g	Lot No.	<input type="text"/>

✓ Seed samples are tested for purity, germination, results are stored and extracted at the process of accepting the Seeds.



Quality Check

Quality Check

Financial Year	2008 - 2009 *	Production Year	2008 - 2008 *
Quality Test Code	8 *	Quality Test Date	09/02/2008 *
Station	SEEDUNIT - SEED UNI *	Re Test No.	0
Crop	Bt_Brinjal - Bt_Brinjal	Variety	Udupigolla - Udupi Go
Class Of Seed	Nucleus	Lot No.	Lot/Bt_udu02feb2009
Receipt No.	13	Accepted Quantity	750 g
Planned By	--Select--	Remarks	

Param Code	Parameter	High Range	Low Range	Uom	Ob Reading	Type
Genetpurity	Genetic purity	100	99	%	99	Q
Germin	Germination	100	95	%	99	Q
Moisture	Moisture	8	4	%	6	Q

Approved Quantity	750 g	Rejected Quantity	0 g
Final Status	Yes	Expiry Date	02/16/2011 *

- ✓ Quality process based on pre-defined parameters to facilitate quality check.
- ✓ Based on observation reading, quality approval is done; approved quantity is packed in relevant pack lots and Stock updated.



Seed Allotment

Seed Allotment

Financial Year	<input type="text" value="2009 - 2010"/> *	Production Year	<input type="text" value="2009 - 2009"/> *
Allotment Code	<input type="text" value="2"/> *	Allotment Date (dd/mm/yyyy)	<input type="text" value="12/5/2009"/> *
Indent Type	<input type="text" value="External"/>	Cut off Date	<input type="text" value="31/05/2010"/>
Station	<input type="text" value="SEEDUNIT - SEED UN"/> *	Indent Source	<input type="text" value="Department of agricultu"/> *
Indent Ref No.	<input type="text" value="ref2009/25/5"/> *	Indent code	<input type="text" value="2"/>
Party	<input type="text" value="BioTech"/>		

Allotment Details

Crop Code	<input type="text" value="Wheat - Wheat"/>	Variety Code	<input type="text" value="B.YELLOW"/>
Seed Type	<input type="text" value="Breeder"/>	Indented Quantity	<input type="text" value="1500"/> Kg
Lot No.	<input type="text" value="LotWheat/B.Y/2009"/>	Packing Code	<input type="text" value="bag_03"/>
Size / Capacity	<input type="text" value="30"/> Kg	No. Of Pack(s) Available	<input type="text" value="66"/>
No. Of Pack(s)	<input type="text" value="50"/>	<input type="button" value="Insert"/>	

[Previous](#) [Next](#)

Delete	S.No.	Crop	Variety	Seed Type	Lot No.	Indented Qty	Size / Capacity	No Of P.
Sum of pack qty. : 0								

✓ Once the packing is through then the allotment will be done according to the indent and ready for invoice.



Invoice

Invoice

Financial Year	<input type="text" value="2007 - 2008"/> *	Production Year	<input type="text" value="2007 - 2007"/> *
Invoice No.	<input type="text" value="2"/> *	Invoice Date (mm/dd/yyyy)	<input type="text" value="12/17/2007"/> *
Pack Slip No	<input type="text" value="2007/1"/> *	Indent No.	<input type="text" value="1"/> *
Station	<input type="text" value="SEEDUNIT - SEED"/> *	Advance Amount	<input type="text" value="0.0000"/> *
		Remarks	<input type="text" value="Nil"/>

Invoice Details

Previous Next

Edit	Delete	S.No.	ClaasOf	Seed	Crop	Variety	Lot No.	Size/Capacity	No. Of pack	Total Qt
Edit	Delete	1	Breeder		Soybean	JS-335	07-II-R-335-35-01	30	207	6210

Total Amount 1242000

Vat % 4

Bill Amount **1291680**

Invoice Type * Party

✓ For Payment procedures after allotting the seed invoices are generated with the payment options

- Cash
- Credit



Few Reports

Indent list	Seed Receipt
Indent wise Production Plan	Production Plan details
Seed Monitoring Report	Seed Production Program
Seed Analysis Report	Seed Distribution
Day book of Seed Issue	Packing Stock
Day book of Seed Receipt	Raw stock



Indent Wise Production Plan

Production Plan

PlanId	353	PlanDate	15-September-2010
PlanFor_FinY	3	PlanBy	SEEDUNIT
CropName	Bt_Brinjal	Variety	Malapur Local
Class Of Seed	Foundation	Season	Summer 2010
Incharge	Mr.Incharge	Remarks	

Indent Details

Indent Id	Indent Source	Source Name	SrcIndentId	Indented Qty	Planned Qty
384	State_Govt	State Government	State/PA/BT_Mal	500.00Kg	600.00 Kg
Total:				500.00 Kg	600.00 Kg

Targeted Quantity

ResCode	Targeted Qty	Member
SEEDUNIT	600.00 Kg	Mr.Maint
Total:		600.00 Kg



Production Plan Report

Production Plan Details

Run Date: 9/16/2010

Crop Group	Crop	Variety	Class of Seed	Source/Res.Station	Plan Id	PlanDate	Planned Qty	IndentId	Indent Dt	Indented Qty	Targeted Qty
Pulses	Blackgram	TAU-1	Breeder	Indian Council of Agricultural Research Annigeri	192	27-Apr-2010	1,200.00 Kg	213	27-Apr-2010	1,000.00 Kg	1,500.00 Kg
Pulses	Blackgram	TAU-1	Breeder	State Government MARS Dharward	192	27-Apr-2010	1,800.00 Kg	214	27-Apr-2010	1,500.00 Kg	1,000.00 Kg
Pulses	Blackgram	TAU-1	Breeder	State Government Annigeri	192	27-Apr-2010	1,800.00 Kg	214	27-Apr-2010	1,500.00 Kg	1,500.00 Kg
GM_Crops	Bt_Brinjal	Kudachi Local	Breeder	Department of agriculture SEED UNIT	351	15-Sep-2010	600.00 Kg	382	15-Sep-2010	500.00 Kg	600.00 Kg
GM_Crops	Bt_Brinjal	GO 112	Nucleus	Indian Council of Agricultural Research SEED UNIT	352	15-Sep-2010	240.00 Kg	383	15-Sep-2010	200.00 Kg	240.00 Kg
GM_Crops	Bt_Brinjal	Malapur Local	Foundation	State Government SEED UNIT	353	15-Sep-2010	600.00 Kg	384	15-Sep-2010	500.00 Kg	600.00 Kg
Oilseeds	Castor	VP-1	Breeder	State Government	213	27-Apr-2010	30.00 Kg	239	27-Apr-2010	25.00 Kg	30.00 Kg



Stewardship and Crop Monitoring Report

Stewardship and Crop Monitoring Report

Run Date: 10-Feb-2009

Monitor No: 3	Research Station: SEED UNIT	Dt. of Transplantation : 4-Dec-2008
Class of Seed : Breeder	Field Location : Anigol	Expected Yield : 3000 g
Crop : Bt_Brinjal	Area : 10.00 acre	Plan Id : 5
Variety : Malabar local	Plot No :	

Stage: Stage I - 15 DAT

SI.No	Test	Observed Value	Crop Conditon	Remarks
1	Gene Expression Test	3	Medium	
2	Insect Population monitoring	12	Medium	
3	Event Purity Test	20	Average	

Monitor Dt: 15-Oct-2008 **Monitor:** Charan Raj

Stage: Stage II - 30 DAT

SI.No	Test	Observed Value	Crop Conditon	Remarks
1	Gene expression test	2	Medium	
2	Insect Population monitoring	2	Good	
3	Baseline suceptibility monitoring	23	Average	
4	Event Purity Test	32	Excellent	

Monitor Dt: 30-Oct-2008 **Monitor:** Suresh Kumar

Stage: Stage III - 45 DAT

SI.No	Test	Observed Value	Crop Conditon	Remarks
1	Gene expression test	20	Medium	
2	Insect population monitoring	20	Medium	
3	Baseline suceptibility monitoring	20	Medium	
4	Event Purity Test	20	Good	

Monitor Dt: 14-Nov-2008 **Monitor:** Ramesh Naidu

Stage: Stage IV - 60 DAT

SI.No	Test	Observed Value	Crop Conditon	Remarks
1	Gene expression test	20	Medium	
2	Insect population monitoring	nil	Medium	
3	Baseline suceptibility monitoring	39	Good	
4	Event Purity Test	30	Good	

Monitor Dt: 29-Nov-2008 **Monitor:** Ravi Kumar



Receipt

RECEIPT

To,

Special Officer (Seeds)

Receipt No

11

I, Mr./Ms.

Janardhan D

belonging to

Sangolli

village,

Ranga reddy

taluka, hereby declare that,

I have received Rs.

30,000.00 (Rupees thirty thousand and paise zero only.)

Towards the supply of seeds as detailed below with agreed terms & conditions.

Sl. No.	Crop	Variety	Seed	Quantity	Rate Rs	Advance	Payment (Rs.) Final	Total
1	Bt_Brinjal	Malabar local	Nucleus	13000.00 g	10.00	100000.00	30000.00	130,000.00

DD/Cheque No: 45748

Amount (Rs.) 30,000.00 (Rupees thirty thousand and paise zero only.)

Date: 1/29/2009 12:00

Signature of the Farmer



Business Contact

Thank You

Sathguru Management Consultants Pvt. Ltd
Plot 54, Sagar Society, Road 2, Banjara hills-34

www.sathguru.com

Ph:+91-4030160333

