APAL Coolstore Stock System

Graeme Forsythe
GFAP Pty Ltd

Project Number: AP09048

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FINAL REPORT

AP09048
APAL Cool Store Stock System

November 2010

Graeme Forsythe
GFAP Pty Ltd

Horticulture Australia Project Number: AP09048

Key Personnel

Project Leader:
Graeme Forsythe
Director
GFAP Pty Ltd
28 Auld Avenue
Eastwood, NSW 2122.
Phone: 02 9874 1009
Fax: 02 9874 8343

Software Development:
Tom Dighton,
Director
GFAP Pty Ltd
28 Auld Avenue
Eastwood, NSW 2122.
Phone: 02 9874 1009
Fax: 02 9874 8343

Purpose

This report is the Final Report of the project known as AP09048 "APAL Coolstore Stock System".

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Date

30 November 2010

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1. Media Summary

APAL collect industry apple & pear cool store stocks monthly and provide reports to industry. This is a continuing service delivered by APAL for industry against industry priorities.

Coolstore stock data is important data for managing crop flow.

The purpose of the new APAL Coolstore Stock System [CSS] project is to automate data capture, processing & reporting, and to allow all Australian coolstores to contribute data.

The current paper based system operates in the following way:

a) The process is manual with a data capture form emailed to a sample of cool stores on the last day of each month for return on the first day of the new month
b) Data supplied by cool stores is manually entered into an XLS
c) This data is factored up to deliver numbers representative of all cool stores
d) The XLS generates report tables & graphs
e) A report is then compiled & distributed

Deployment of the web based CSS for apple & pear cool stock reporting will mean:

a) Data can be contributed by all cool stores, not a sample
b) Data is entered by electronic form direct to a web server database eliminating re-keying into XLS
c) Automated generation of tables & graphs
d) Application of access restrictions according to APAL rules eg only access reports if contribute data
e) APAL management concentrating on ensuring coolstores submit data and reconciling reports before their release, rather than having to re-key data and process the XLS

2. Technical Summary

A web-based CSS for has been developed to allow:

a) APAL to register coolstores
b) Coolstores to enter fruit received in the month & closing stock at month end
c) APAL to generate reports & graphs of this data

Each participating coolstore is registered on the system and must install the free Formatta Filler software.

The coolstore enters stock received & closing stock for each month of a year on a Coolstore Stock Record Form either by numbers of bins with specified average bin weight or by kilogram. The system aggregates the data for reporting and shows comparisons against the previous year and the previous five years with breakdowns by variety & state.

The system is intuitive and easy to use. It requires little or no training for personnel experienced with normal packing computer software.

The system could be used with any type of produce that is stored for longer periods, not just apples & pears.

3. Introduction

APAL collect industry apple & pear cool store stocks monthly and provide reports to industry. This is a continuing service delivered by APAL for industry against industry priorities. The current system is very manual and extrapolates data to a national level based on data provided by a small sample of coolstores in each state.

GFAP provide the systems & infrastructure that operate industry based data capture & reporting systems for the Australian & New Zealand avocado industries, and citrus, macadamia, onion & stone fruit. These are operated respectively by Avocados Australia, NZ Avocado Industry Council, Citrus Australia, Australian Macadamia Handlers, Onions Australia & Summerfruit Australia.

At the invitation of the APAL R & D Committee GFAP prepared a scoping document to automate data capture & processing and to allow all coolstores to contribute data. The project was subsequently approved by the APAL Board.

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Investing in a collaborative web based system will also provide an opportunity to upgrade the functionality of the CSS to include parameters such as pack out estimates.

The APAL "community" infrastructure installed can provide the platform to run other systems that may be required in the future.

4. Materials and Methods

The software was developed by GFAP Pty Ltd and tested with the entry of historical data and then by APAL entering the latest data for 2010.

The program uses the Formatta Filler software to display data entry forms. This software is free and is well suited to use by less skilled operators as the various screens look like a paper form.

The following tasks have been undertaken to bring the new web based collaborative CSS to fruition:

a) Functional specification for CSS finalised & confirmed
b) APAL "community" infrastructure installed to provide APAL with:

   User Management – allowing APAL to register new Coolstores, change registration details, suspend Coolstores etc [initial registrations will be bulk uploaded]
   Content Management - allowing APAL to publish content accessible under login by registered users in the APAL "community"
   Profile Management – allowing APAL to maintain lists of varieties and other parameters required for the CSSS

c) CSS developed
d) Historical data uploaded into CSSS database
e) CSS tested internally
f) CSS tested by pilot group of coolstores
g) CSS updated based on internal & pilot group testing
h) CSS rollout

5. Results

The main features of the system are:

a) GFA infrastructure has been installed allowing APAL to manage coolstore registrations
b) Master profile forms have been developed
c) Coolstores can login to enter data for each new month
d) Coolstores can view their own detailed data but cannot view detailed data belonging to another coolstore
e) Coolstores can view the aggregated industry data reports & graphs
f) APAL can generate graphs & reports from the system that they can publish

A manual for the use of the system is provided at Appendix 1.

6. Discussion and Conclusions

This system, while simple, is powerful and will provide a level of efficiency that is unattainable with the current paper based system.

More importantly all Australian coolstores can participate and contribute data. This ensures more accurate data than is currently reported.

7. Recommendations

8. Acknowledgements

This project was facilitated by HAL in partnership with Apple and Pear Australia Ltd (APAL) and was funded by the Apple and Pear industry levy. The Australian Government provides matched funding for all HAL's R&D activities.

Appendix 1: User Instructions for Cool Store Stock System

Download & Install Formatta Filler on PC

1

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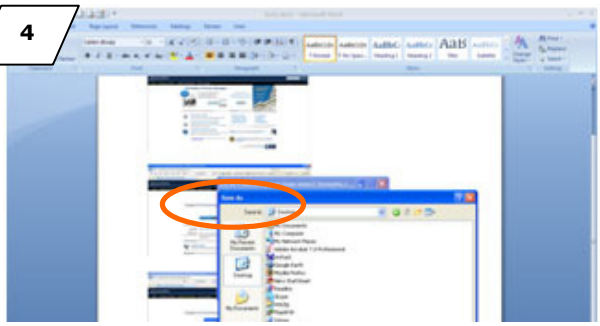


You must download Formatta Filler

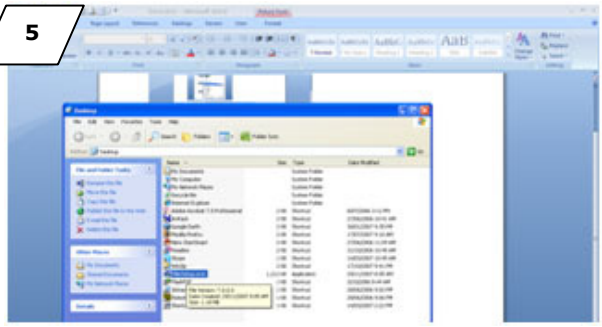
1. *Connect to www.formatta.com*
2. *Click on "Products" [screen 1] to display screen 2*
3. *Click on "Formatta Filler 7.0 PC [screen 2]*
4. *Click "Save" [screen 3]*
5. *Select location on PC to save the downloaded file such as "Desktop" [screen 4]*
6. *Download file "FillerSetup.exe" displays in file list [screen 5]*

You must now install Formatta Filler

1. *Double click "FillerSetup.exe" [screen 5] to display screen 6*
2. *Click "Run"*
3. *Follow the installation steps*
4. *Installation is complete when a Formatta Registration Form displays*
5. *Registration is optional*

Note – If you use the Agrofresh system to order Smartfresh treatments you will already have Formatta Filler installed

5



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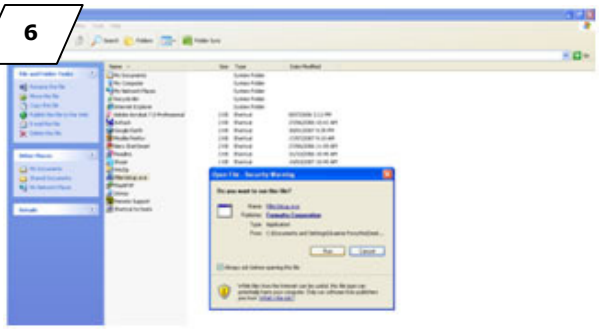


Login & Setup of User Profile Data

Login

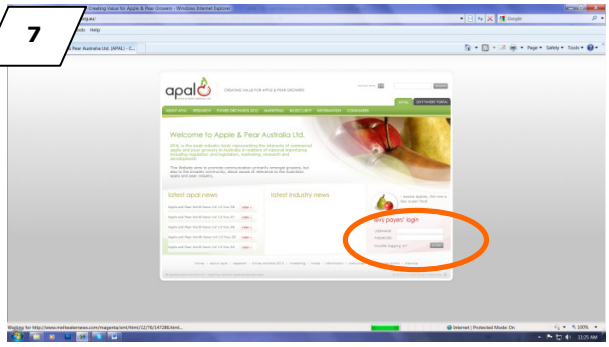
1. *Connect to www.apal.org.au*
2. *Click on "Login" for CSS System [screen 7] to display screen 8*
3. *Enter your Username & Password; click "Login" to display screen 9*

User Profile

1. *Select "Services/Profile Forms" in menu bar on screen 9 to display screen 10*
2. *Click the date link in third column [screen 10] to open User Profile Form" [screen 11]*
3. *Update User Profile data*
4. *Click "Send" button top or bottom right*

Phone & fax no format – 99 9999 9999
Mobile no format – 9999 999 999
ABN format – 99 999 999 999
Use upper & lower case where possible

7



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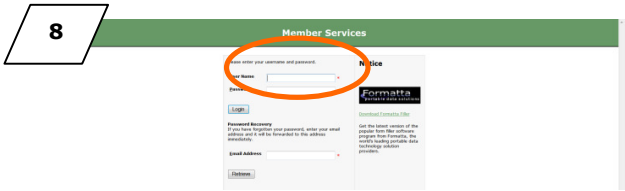

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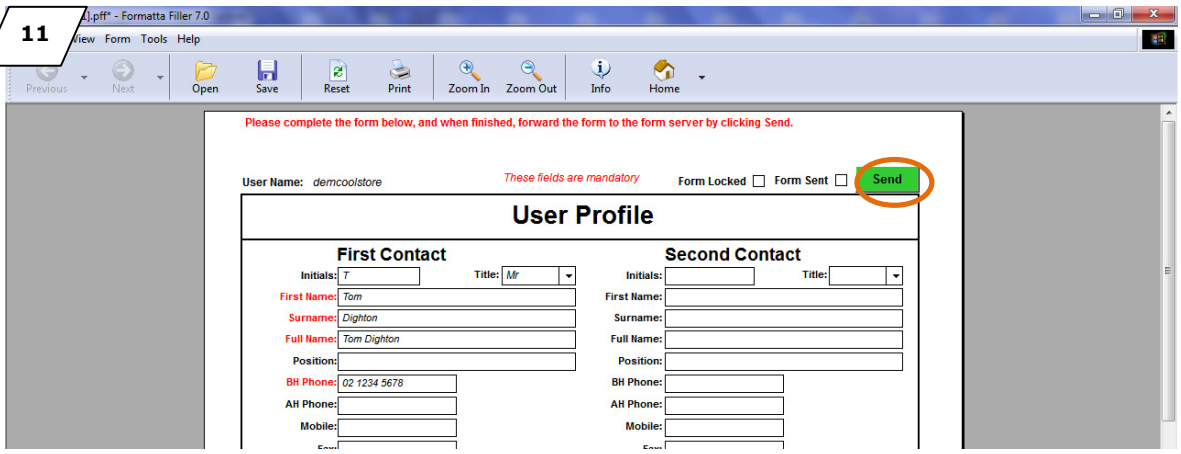


Create Coolstore Stocks Record

Coolstore Stocks Record – First Month

1. *Select "Cool Store Stocks System" in menu bar under "Services" [screen 9] to display screen 12*
2. *Function button will display "Coolstore Stocks"*
3. *Select "Create Cool Store Stocks" against "Menu Selection", select "Produce" type & "Input Year"; then click "Submit" to display screen 13*
4. *Click the pink button to generate "Cool Store Stocks" Form [screen 14 next page]*
5. *Enter data for the first month*
6. *You can enter No's of Bins or '000Kg*
7. *If you enter No's of Bins change the Av Bin Weight if different to 360Kg*
8. *Click "Send" button top or bottom right*
9. *Close Form [click red "X" at top right of Filler browser]*
10. *Click "Refresh" in menu bar to update the "Create Seed Sales Record" report screen 15*

Red labels on Form are mandatory data

Coolstore Stocks Record – Subsequent Months

1. *The same form is used to enter data for the balance of the year*
2. *You can access the form by repeating "3" to display screen 15; then click the green "Ref No" link to display the form, add the next month's data and click "Send"*
3. *Alternatively you can select View Cool Store Stocks against Menu Selection to display screen 17*
4. *Click one of the green "Ref No" links to display the form, add the next month's data and click "Send"*

12

13

15

14

ase complete the form below, and when finished, forward the form to the form server by clicking Send.

VERSION: 14 Form Locked ☐ Form Sent ☐ Send

Coolstore Stocks for Apple - Production Year 2010

Coolstore	NSW Coolstores						Units	Bins ⊙ '000Kg ○			Ref No	CSS100029	
Variety		Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Fuji	Opening	202	9	3	157	879	846	707	559	295			
	Stock In	0	0	154	722	0	0	0	0	0			
Av. Bin Weight	Stock Out	-193	-6			-33	-139	-148	-264	-295			
360	Closing	9	3	157	879	846	707	559	295	0			
Gala	Opening	1	1	1534	1476	1285	1100	911	633	464	464		
	Stock In	0	1533	0	0	0	0	0	0	0			
Av. Bin Weight	Stock Out			-58	-191	-185	-189	-278	-169				
360	Closing	1	1534	1476	1285	1100	911	633	464	464			
Golden Delicious	Opening	8	3	13	26	30	32	27	23	10	10		
	Stock In	0	10	13	4	2	0	0	0	0			
Av. Bin Weight	Stock Out	-5					-5	-4	-13				
360	Closing	3	13	26	30	32	27	23	10	10			
Granny Smith	Opening	156	1	1	812	1253	1234	1097	979	791	791		
	Stock In	0	1	811	441	0	0	0	0	0			
Av. Bin Weight	Stock Out	-155	-1			-19	-137	-118	-188				
Red Delicious	Opening	1386	540	24	3208	2862	2488	2159	1763	1398	1398		
	Stock In	0	0	3184	0	0	0	0	0	0			
Av. Bin Weight	Stock Out	-846	-516		-346	-374	-329	-396	-365				
360	Closing	540	24	3208	2862	2488	2159	1763	1398	1398			
Sundowner	Opening	510	245	1	6	367	533	528	519	403	403		
	Stock In	0	0	5	361	166	0	0	0	0			
Av. Bin Weight	Stock Out	-265	-244				-5	-9	-116				
360	Closing	245	1	6	367	533	528	519	403	403			
Other Apple	Opening	19	19	63	329	573	484	321	117	63	63		
	Stock In	0	44	266	244	0	0	0	0	0			
Av. Bin Weight	Stock Out					-89	-163	-204	-54				
360	Closing	19	63	329	573	484	321	117	63	63			
Total	Opening	2470	826	1643	6014	8668	8372	7217	5809	4211	3916		
	Stock In		1592	4433	3191	404							
	Stock Out	-1644	-775	-62	-537	-700	-1155	-1408	-1598	-295			
	Closing	826	1643	6014	8668	8372	7217	5809	4211	3916			

Delete Version No: 14 Date: 30/11/10 Send

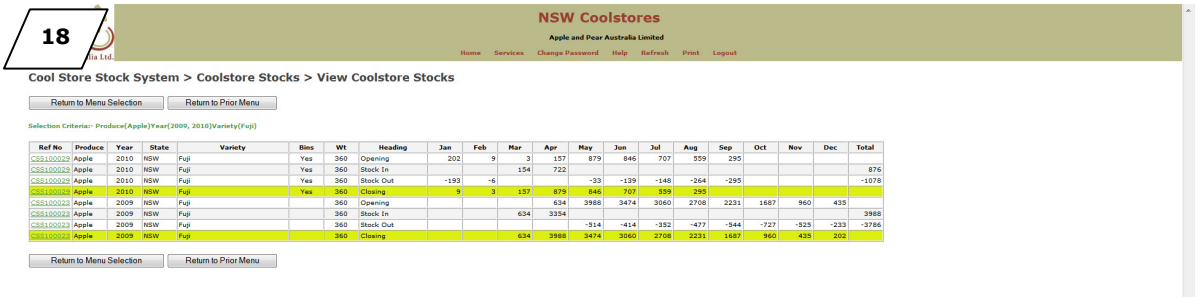
View Coolstore Stocks

View Coolstore Stocks

1. *Select View Cool Store Stocks against Menu Selection to display screen 17*
2. *Use the filters to narrow the selection as required*
3. *Click "Submit" to display the equivalent of screen 18*

17

18



APAL Reports & Graphs

APAL Reports & Graphs

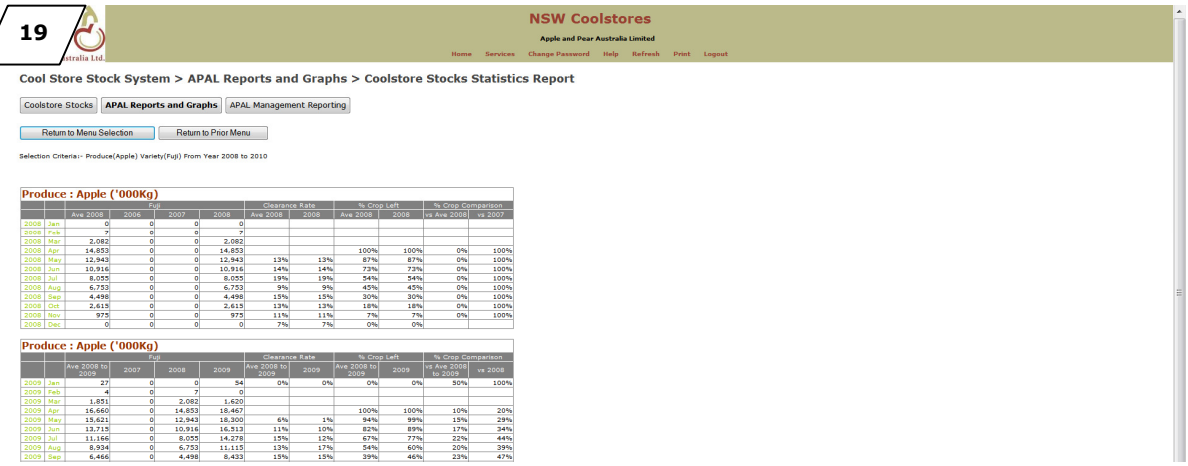
3. *From screen 12 click Function button for APAL Reports and Graphs to display screen 17*
4. *Select from the various report & graphing options against "Menu Selection" to display various reports & graphs*
5. *Use the filters to narrow the selection as required*

1. *Click "Submit" to display the equivalent of screen 18-21*
2. *Reports & graphs are available in various formats for each variety & variety comparisons, for each state & state comparisons*

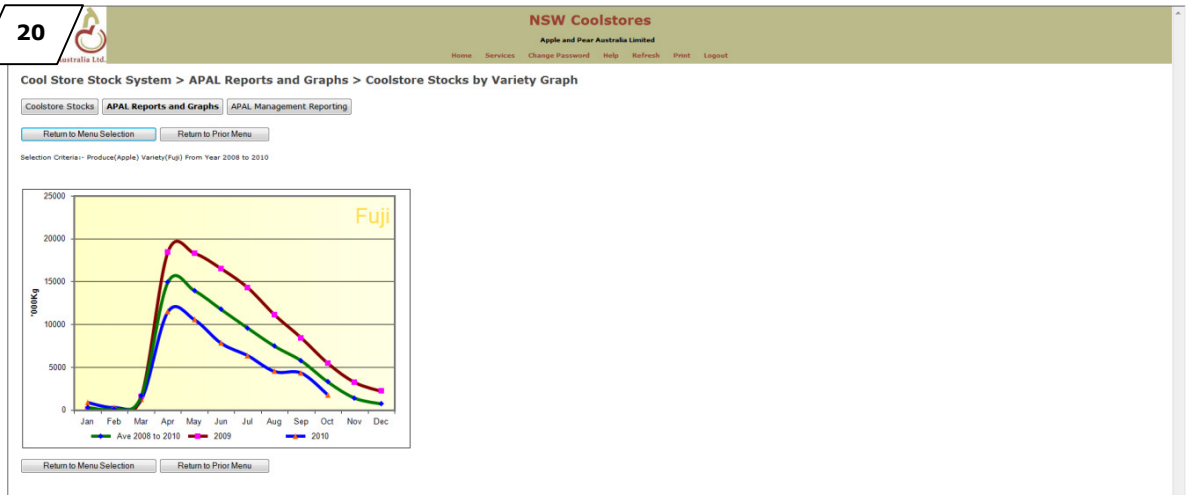
17

18

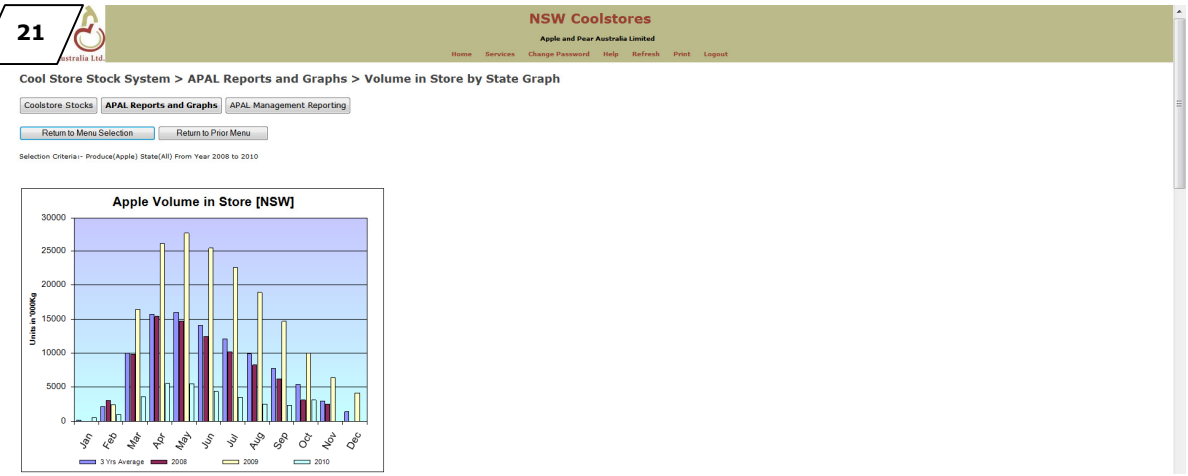
19



20


NSW Coolstores
Apple and Pear Australia Limited
Home Services Change Password Help Refresh Print Logout
Cool Store Stock System > APAL Reports and Graphs > Coolstore Stocks by Variety Graph
Coolstore Stocks
APAL Reports and Graphs
APAL Management Reporting
Return to Menu Selection
Return to Prior Menu
Selection Criteria:- Produce(Apple) Variety(Fuji) From Year 2008 to 2010
Fuji
'000Kg
25000
20000
15000
10000
5000
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Ave 2008 to 2010
2009
2010
Return to Menu Selection
Return to Prior Menu

21

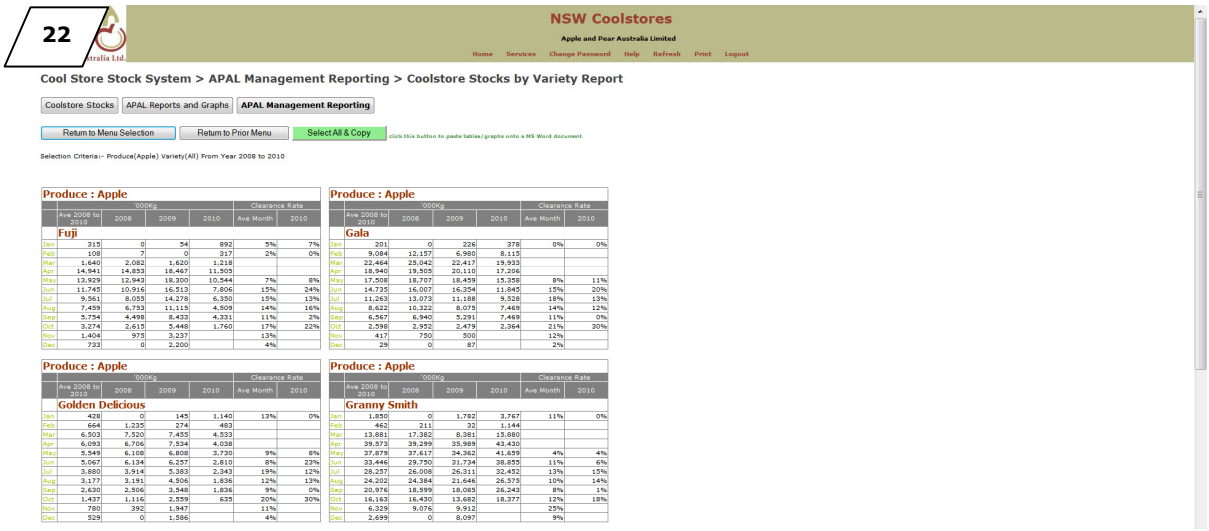
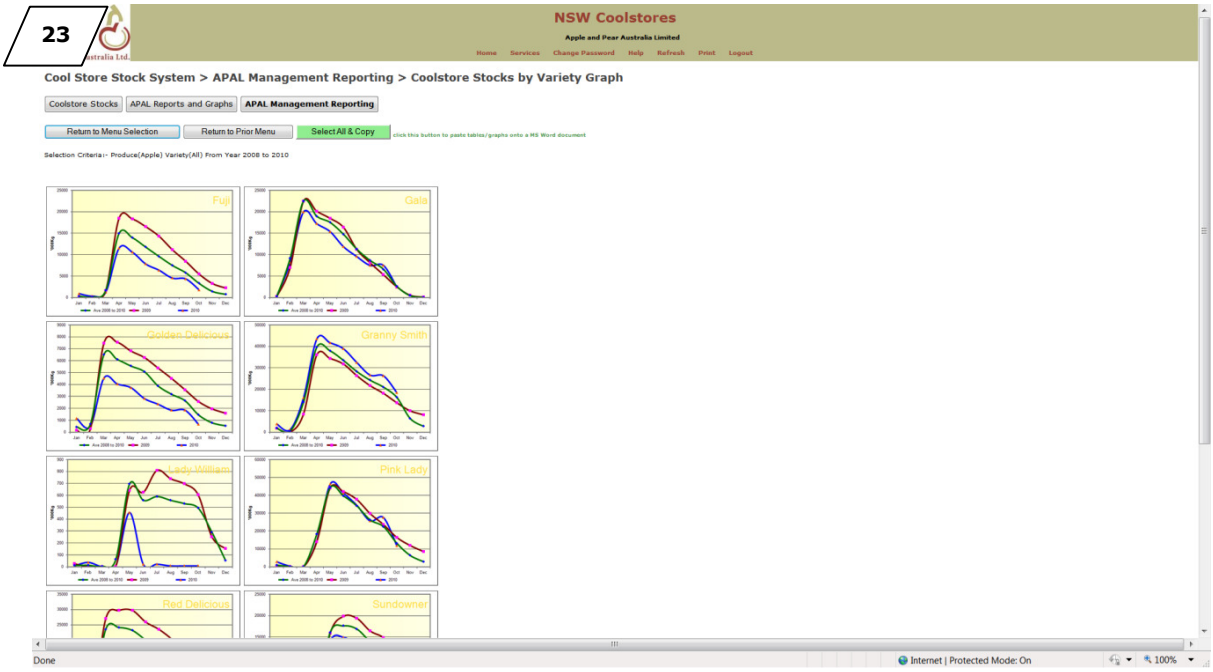

NSW Coolstores
Apple and Pear Australia Limited
Home Services Change Password Help Refresh Print Logout
Cool Store Stock System > APAL Reports and Graphs > Volume in Store by State Graph
Coolstore Stocks
APAL Reports and Graphs
APAL Management Reporting
Return to Menu Selection
Return to Prior Menu
Selection Criteria:- Produce(Apple) State(All) From Year 2008 to 2010
Apple Volume in Store [NSW]
Units in '000Kg
30000
25000
20000
15000
10000
5000
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
3 Yrs Average
2008
2009
2010

APAL Management Reporting

APAL Management Reporting

1. *From screen 12 click Function button for APAL Management Reporting*
2. *This function is primarily for APAL administration to generate reports & graphs for publication in the monthly CSS Report*
3. *The function has been made available to Coolstores*
4. *Examples of reports & graphs display in screens 22-23 below*

22



23