



This document is designed to provide basic support for implementing variable rate seeding in common precision ag equipment. It is neither an operating manual nor a set-up guide for the monitor. Rather, it is a general set of principles designed to provide help with trouble shooting while preparing for a VRS operation.

Contents:

- Page 2: Prescription File Management
- Page 4: Importing VRS Prescription Files
- Page 6: Cleaning up Prescriptions
- Page 8: Selecting VRS Prescription Files
- Page 13: Selecting the RX Rate
- Page 18: Creating Varieties for Planting
- Page 22: Changing Varieties Within A Field
- Page 26: Managing Varieties
- Page 34: Cleaning up Products
- Page 36: Setting Up Split Planter Treatment Data
- Page 40: Exporting As-Applied Files
- Page 42: Troubleshooting the GS2 Software version

Prescription File Management



Prescription File Management

John Deere GS2

3

1

When using shapefiles for VRS Prescriptions, there will typically be 4 unique file types (*.shp, *.shx, *.dbf, and *.prj) for each prescription generated.

Prescription units must be in **seeds per acre**.

2

Tip: The GS2 display only shows 26 characters.

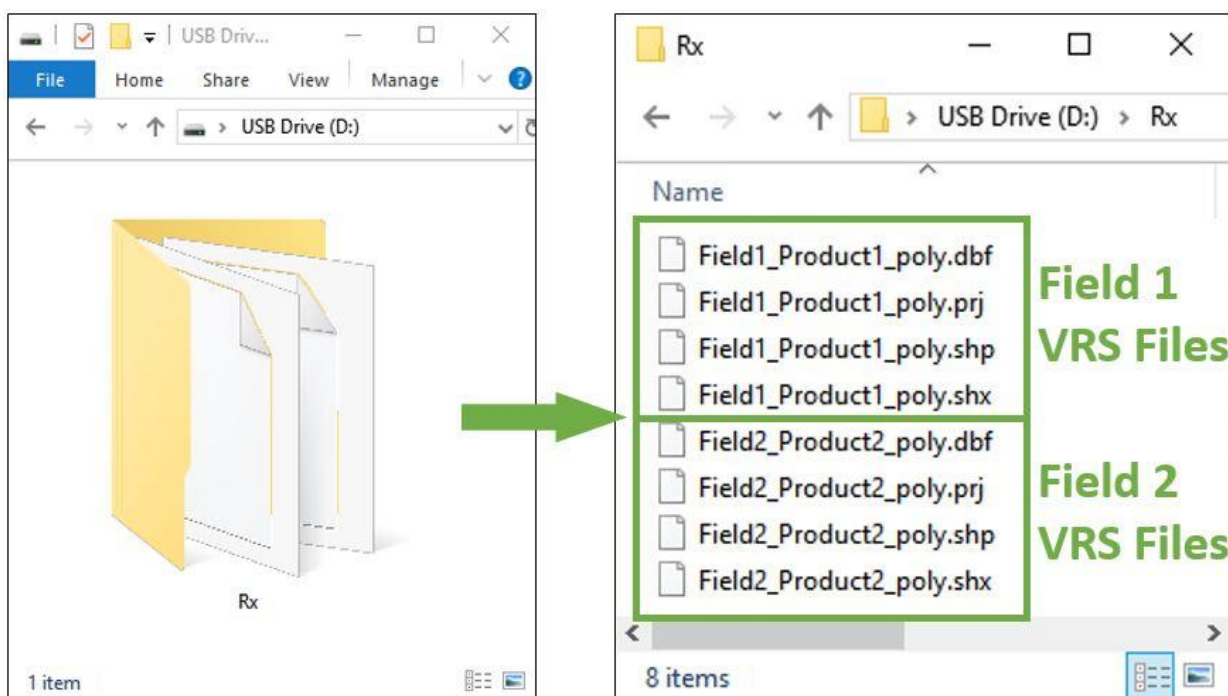
3

The compact flash card **MUST** remain with the monitor at all times. You need to bring your laptop with you to the producer's location and transfer the files on site.

Once in the cab with the compact flash card create a folder named "Rx" at the highest level of the drive (i.e. D:Rx).

Using Windows Copy/Paste tools, copy all the individual shapefiles into this folder. There are four files per field, so for a customer with more than one prescription per field, there are several files in this new Rx folder.

Multiple VRS shapefiles can be in the same folder. To help identify the correct shapefile to use in the field, use the field name and product name to name the shapefile.



Importing VRS Prescription Files



Importing VRS Prescription Files

John Deere GS2

1

Insert the compact flash drive containing the Rx folder and shapefiles into the GS2 display and close the door.



2

Once the compact flash card is inserted the monitor will begin loading the settings. When it is complete it will return you to the last screen you were on. You will now have access to your prescription. Follow the **Selecting VRS Prescription Files** Section to do this.



Loading Settings

Loading data from the compact flash card.

Data loss may occur if the card is removed prematurely.

Cleaning up Prescriptions



Cleaning up Prescription John Deere GS2

7

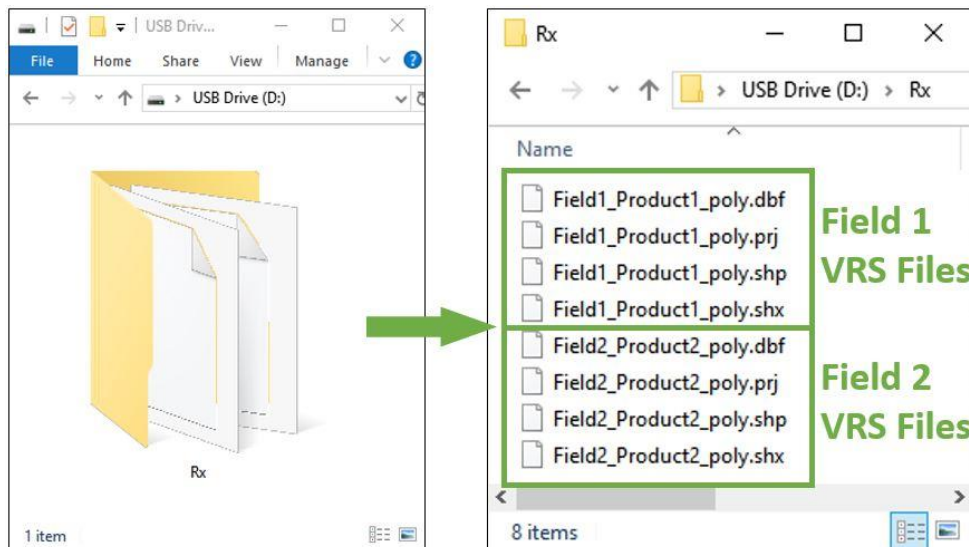
1

Eject the Compact Flash card that contains the Rx folder with the shapefiles.



2

Use a computer with a USB to Compact flash card reader, to open the Rx Folder on the compact flash card. When in the Rx Folder, **delete** the previous shapefiles from the past year. The folder can be left on the Compact flash card for later use



Since the card is required to operate the monitor DO NOT take the card from the grower. Make a copy of it and return the card to the monitor.

Selecting VRS Prescription Files



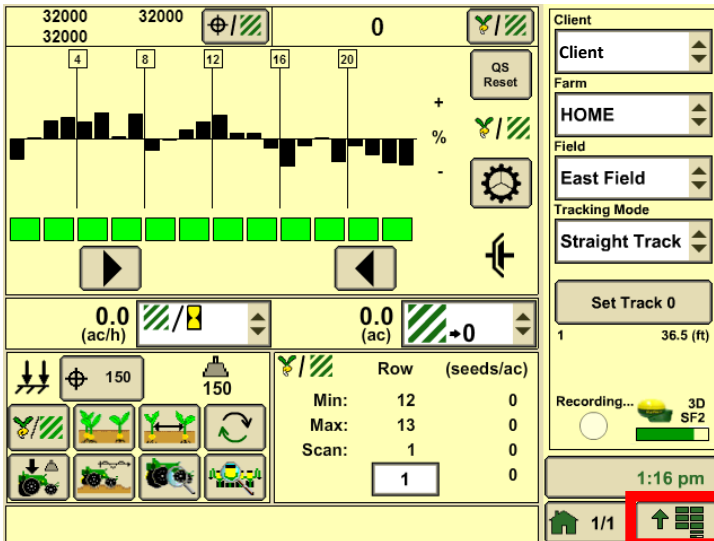
Selecting VRS Prescription Files

John Deere GS2

9

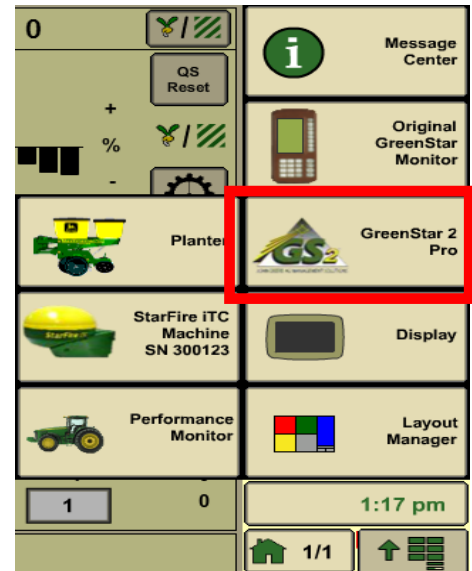
1

From the **Planting** screen press the **Menu** button on the bottom right hand side of the screen. **Note: The Menu button is available on every screen.**



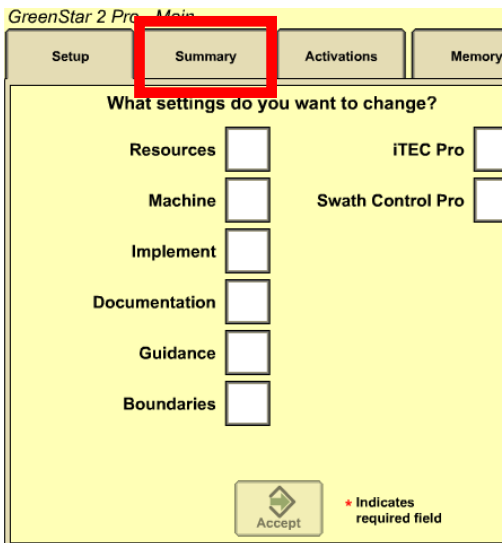
2

In the **Menu** screen press the **GS2** button.



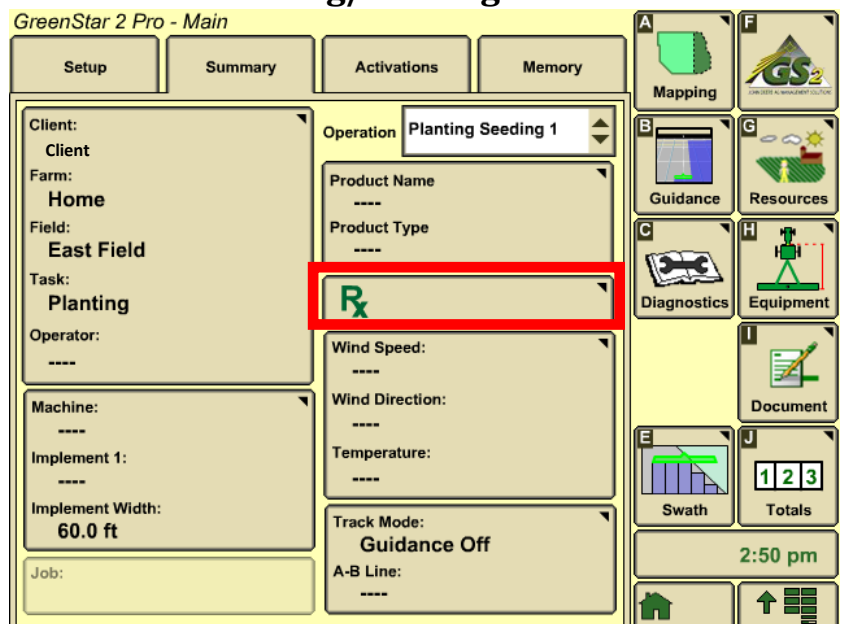
3

Press the **Summary** tab to changes varieties. If unable to see this screen, press the **GS2** button in the upper right corner of the screen.



4

Be sure the grower information (Client, Farm, Task, etc.) are populated correctly. Press the **Rx** box to select the correct VRS map. **Note: The Operation field should read Planting/Seeding.**



Selecting VRS Prescription Files

John Deere GS2

10

5

In the **Prescription** page press **Shapefile** under the Prescription drop down menu.

The screenshot shows the 'Prescription' page. At the top, there is a dropdown menu labeled 'Prescription' which is currently set to '----'. This dropdown is highlighted with a red rectangular box. Below it are fields for 'Name', 'Date Created', '* Product Type', 'Rate Units', and 'Look Ahead (sec)' with a value of '0.0'. There is a table with columns for 'Min', 'Max', 'Out of Field', 'Loss of GPS', and 'Prescription Multiplier (%)'. The 'Prescription Multiplier (%)' is set to '100'. At the bottom, there is a 'Prescription Rate (gal/ac)' field and 'Cancel' and 'Accept' buttons.

6

In the **Shapefile Conversion** page Press the **Shapefile** drop down to select the correct Field.

The screenshot shows the 'Shapefile Conversion' page. At the top, there is a dropdown menu labeled 'Shapefile' which is currently set to '----'. This dropdown is highlighted with a red rectangular box. Below it are fields for 'Name', 'Column', 'Prescription Type', 'Rate Units', 'Out of Field Rate' (set to '0.00'), and 'Loss of GPS Rate' (set to '0.00'). At the bottom, there is a 'Cancel' button, a warning message 'The prescription may differ from the shapefile after conversion.', and an 'Accept' button.

7

In the **Shapefile Conversion** page make sure the Column is set to the attribute value for seeding rate. This is typically not the default.

Common tags for this are Tgt_Rate, Target_Rate, or Seeding_Rate among others.

The screenshot shows the 'Shapefile Conversion' page. The 'Shapefile' dropdown is set to 'East_Field_Rx'. The 'Name' field is 'East_Field_Rx'. The 'Column' dropdown is highlighted with a red rectangular box and is currently set to '----'. Below it are fields for 'Prescription Type', 'Rate Units', 'Out of Field Rate' (set to '0.00'), and 'Loss of GPS Rate' (set to '0.00'). At the bottom, there is a 'Cancel' button, a warning message 'The prescription may differ from the shapefile after conversion.', and an 'Accept' button.

8

For the **Prescription Type** drop down menu press to choose **Seeds by Seed Count**.

The screenshot shows the 'Shapefile Conversion' page. The 'Shapefile' dropdown is set to 'East_Field_Rx'. The 'Name' field is 'East_Field_Rx'. The 'Column' dropdown is set to 'Seed_Plan'. The 'Prescription Type' dropdown is highlighted with a red rectangular box and is currently set to '----'. Below it are fields for 'Rate Units', 'Out of Field Rate' (set to '0.00'), and 'Loss of GPS Rate' (set to '0.00'). At the bottom, there is a 'Cancel' button, a warning message 'The prescription may differ from the shapefile after conversion.', and an 'Accept' button.

Selecting VRS Prescription Files

John Deere GS2

11

9 Enter in rates for **Out of Field** and **Loss of GPS**. This will insure that the planter will still be planting if for some reason the prescription map doesn't totally cover the field dimensions or loss of GPS. Press the box next to each **Rate** to enter.

Shapefile Conversion

Shapefile:

Name:

Column:

Prescription Type:

Rate Units:

Out of Field Rate:

Loss of GPS Rate:

The prescription may differ from the shapefile after conversion.

10 After pressing the box next to the Rate a calculator will appear, use this to enter in the target rate you would like to use. Press **Accept** when you're finished. **Example: 33000 seeds per acre.**

33000

1 2 3 ←

4 5 6

7 8 9

. 0 +/-

11

Once the page is correct press **Accept** at the bottom right side.

Shapefile Conversion

Shapefile:

Name:

Column:

Prescription Type:

Rate Units:

Out of Field Rate:

Loss of GPS Rate:

The prescription may differ from the shapefile after conversion.

12

If everything looks good on the Shapefile Conversion page press **Accept**.

Shapefile Conversion

The shapefile conversion succeeded.

Total Area:	85.60	(ac)
Total Product:	3211798	(seeds)
Maximum Rate:	55000.0	(seeds/ac)
Minimum Rate:	0.0	(seeds/ac)
Average Rate:	37521	(seeds/ac)

Please check the results and accept or cancel the conversion.

Selecting VRS Prescription Files John Deere GS2

12

13

If everything looks good on the Prescription page press **Accept**.

Prescription

Prescription: **East_Field_Rx**

Name: East_Field_Rx

Date Created: 1/14/2014

* Product Type: -----

Rate Units: seeds/ac

Look Ahead (sec): **0.0**

	Min	Max	Out of Field	Loss of GPS
	0.00	55000.00	33000.00	33000.00
	0.00	55000.00	33000.00	33000.00

Prescription Multiplier (%): **100**

Prescription Rate ---- (gal/ac)

Accept

14

Make sure the **Prescription** is showing the correct VRS map.

GreenStar 2 Pro - Documentation

Planting/Seeding **New**

*Seed Type: **Corn**

Prescription: **East_Field_Rx**

Implement Name: ----

Add Variety

	seeds/ac
1	32000
2	32000
3	32000

Assign Variety to Rows

4 8 12 16 20 24

1 2 3

Remove **Advanced Settings** **Rx**

Mapping **Guidance** **Diagnostics** **Resources** **Equipment** **Document** **Swath** **Totals**

1:35 pm

Selecting the Rx Rate

In order to plant the rates in the prescription you must be using the “**Rate 6**” option, which utilizes the prescription rates. This section will walk you through how to enable this.



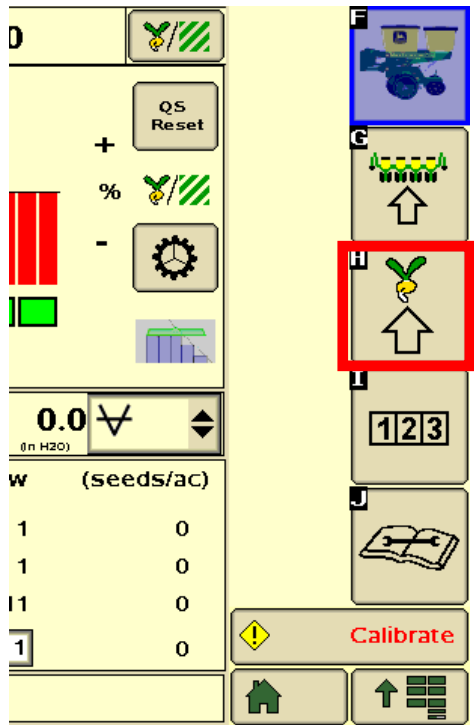
Selecting the Rx Rate

John Deere GS2

14

1

From the Planting screen press the **Rate** button.



2

From the Rate window press **Show Rates**.

Planter - Rates

Crop Name: Edit Crop Name

Show Rates

Use 1 Rate for All Motors ☒

Disk Type:

Seed Disk:

Population Adjust:

3

Press **Change Rates**.

Planter - Rates

Corn

(seeds/ac)	Rate	Target Population:
1	32100	
2	34000	
3	35000	
4	36000	
5	37000	
6	off	

Change Rates

4

Press the field with the Rate number.

Corn

Rate 1

On

Target	32100
High	35300
Low	28600

Avg. Spacing: (in)

Selecting the Rx Rate John Deere GS2

15

5

From the Rate number dropdown press the **Rate 6** option.

A screenshot of a dropdown menu for selecting a rate number. The menu is open, showing options from Rate 1 to Rate 6. Rate 6 is highlighted with a red border.

Rate 1
Rate 1
Rate 2
Rate 3
Rate 4
Rate 5
Rate 6

6

From the Rate window press the **Off** field below the Rate number.

A screenshot of the Rate window for Corn. The Rate 6 dropdown is selected. Below it, the Off field is highlighted with a red border. The window also shows Target (High, Low) and RX (+10%, -10%) options.

Corn

Rate 6

Off

(seeds/ac)

Target

High

Low

RX

+ 10 %

- 10 %

7

Press the **On** option from the dropdown.

A screenshot of a dropdown menu for selecting the On/Off option. The menu is open, showing options Off and On. On is highlighted with a red border.

Off
Off
On

8

Press the **Next** icon to review the rates.

A screenshot of the Rate window for Corn. The Rate 6 dropdown is selected. Below it, the On field is highlighted with a blue border. The window also shows Target (High, Low) and RX (+10%, -10%) options. The Next icon is highlighted with a red border.

Corn

Rate 6

On

(seeds/ac)

Target

High

Low

RX

+ 10 %

- 10 %

Selecting the Rx Rate John Deere GS2

16

9

Notice how the Rate 6 shows the Rx icon. Press the **Next** icon.

Corn	
(seeds/ac)	Target Population:
Rate	
1	32100
2	34000
3	35000
4	36000
5	37000
6	Rx

Change Rates



10

Press the **Planter** icon to return to the main Planting screen.

Planter - Rates

Crop Name: **Corn** Edit Crop Name

Show Rates Use 1 Rate for All Motors ☒

Disk Type: **Corn**

Seed Disk: **A52391 ProMAX 40 Corn**

Population Adjust: **1.00**

 **Calibrate**  

11

From the Screen press the **Target Rate** icon from the upper left portion of the screen.

32100  **0** 

4 8 12 16 20

QS Reset

+

% 

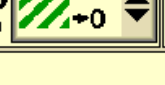
- 



33000.0 (ac)  **0.0** **0.0** 

  **90** **0** (lbs)  **Row** (seeds/ac)

0.0 (mph) 

0.0 (ac)  **0**

Min: 1 0

Max: 1 0

Scan: 14 0

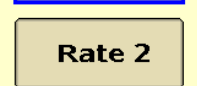
1 0

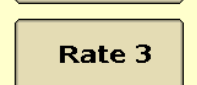
12

Press the **Rate 6** option to use the Rx planting rates.

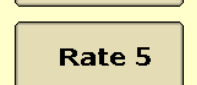
 (seeds/ac)

32100  **Rate 1**

34000  **Rate 2**

35000  **Rate 3**

36000  **Rate 4**

37000  **Rate 5**

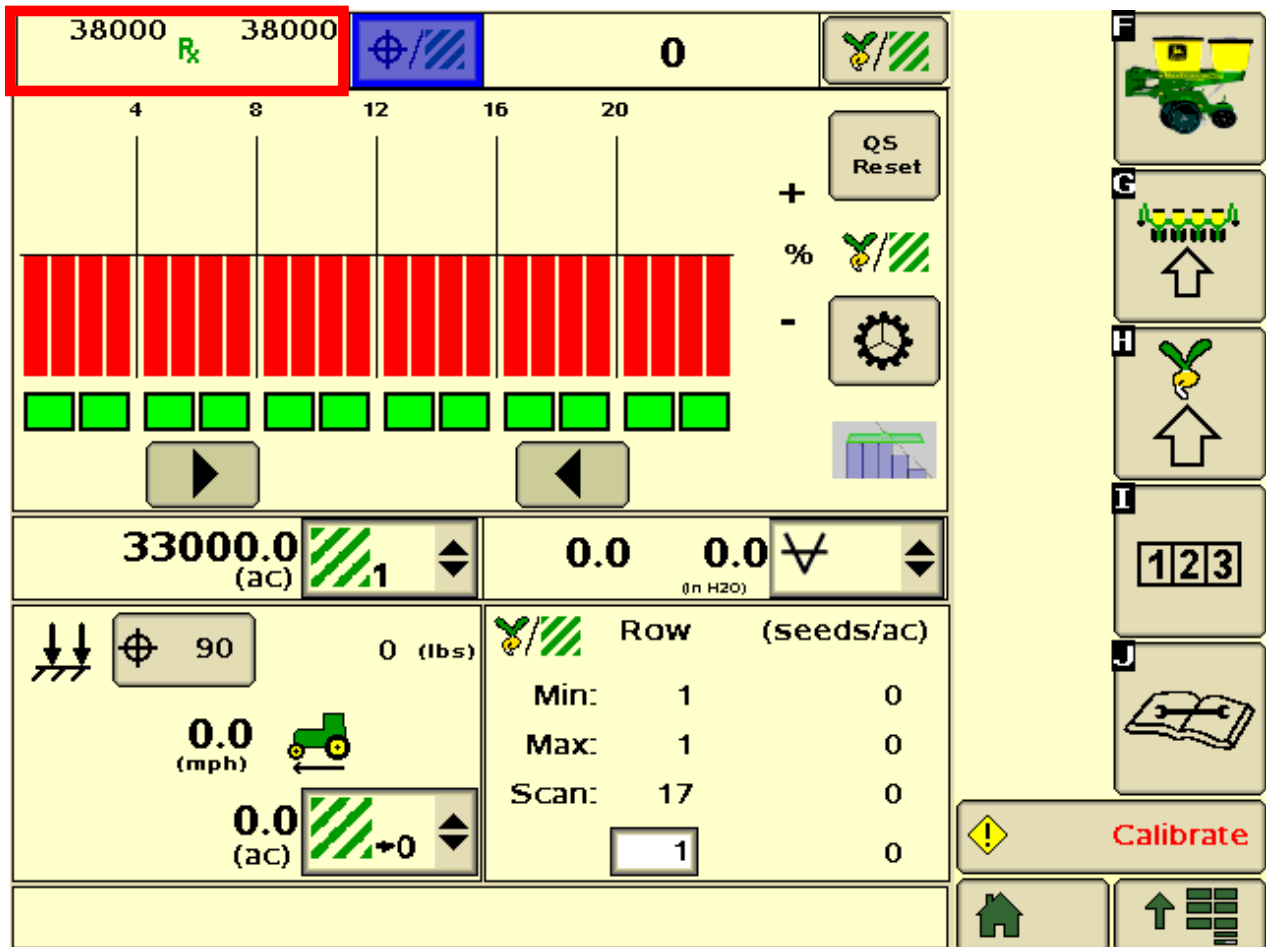
Rx  **Rate 6** 

Selecting the Rx Rate John Deere GS2

17

13

Notice how the rate is now shown with an **Rx** indicating the monitor is using the prescription file rates.



Creating Varieties For Planting



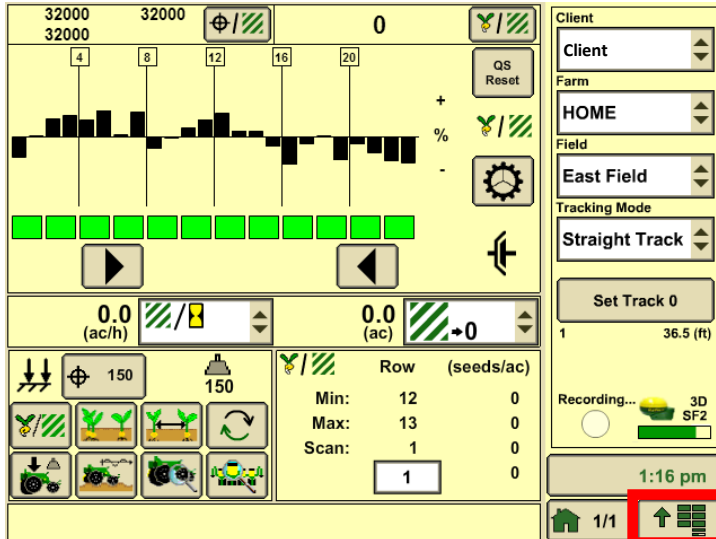
Creating Varieties For Planting

John Deere GS2

19

1

From the **Planting** screen press the **Menu** button on the bottom right hand side of the screen. **Note: The Menu button is available on every screen.**



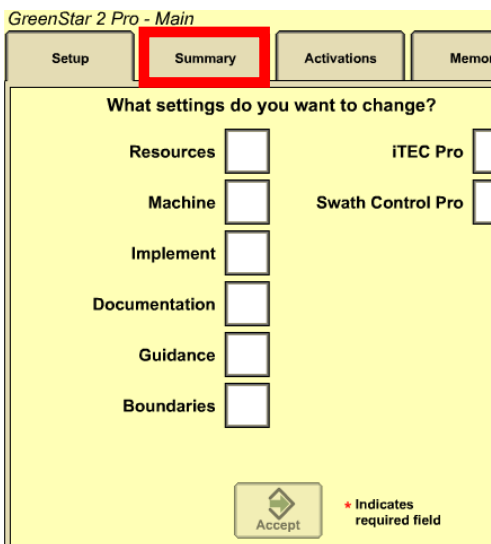
2

In the **Menu** screen press **GS2** button.



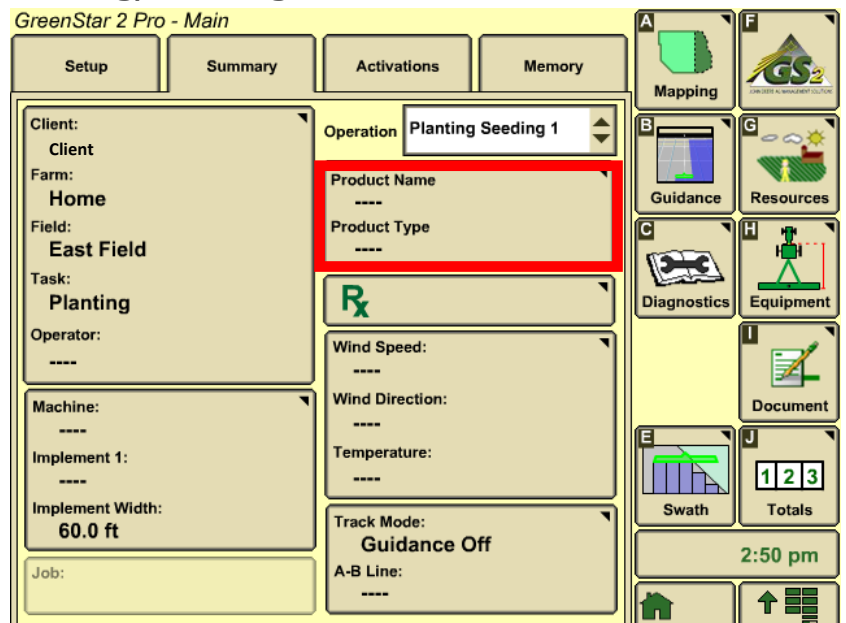
3

Press the **Summary** tab to changes varieties. If unable to see this screen, press the **GS2** button in the upper right corner of the screen.



Be sure the grower information (Client, Farm, Task, etc.) are populated correctly. Press the **Product Name/Product Type** or **Variety** (name used depends on firmware version) field to create a new variety.

Note: The Operation field should read Planting/Seeding.



4

Creating Varieties For Planting John Deere GS2

20

5 First press to open the **Seed Type** drop down menu and change the seed type to the correct crop for the variety type. To create a new variety press **Add Variety**.

GreenStar 2 Pro - Documentation

Corn New

*Seed Type **Corn**

Prescription East_Field_Rx

Implement Name ----

Add Variety

	seeds/ac
1	32000
2	32000
3	32000

Assign Variety to Rows

4 8 12 16 20 24

1 2 3

Remove Advanced Settings Rx

6 In the **Add/Edit Variety** screen press on the **Brand** drop down menu. If the Brand already exists press on the name to select the correct brand and skip step 7 (keyboard to add brand). If the Brand is not created press on the Create New to create it.

Add/Edit Variety

Brand **---**

* Variety ----

* Color

Lot Number

Cancel Accept

7 Use the keyboard to enter in the correct brand, **example: Brand**. Once you have entered in the brand press **Accept** at the bottom right hand side of the screen.

Brand

C

←

1 2 3 4 5 6 7 8 9 0 - =

q w e r t y u i o p []

a s d f g h j k l ; ' ←

↑ z x c v b n m , . / \

abcdef £\$¥ Cancel **Accept**

8 In the **Add/Edit Variety** screen press on the **Variety** drop down menu and create new. If the variety is already created press on the name to select the correct variety and skip step 9 (keyboard to add variety).

Add/Edit Variety

Brand Brand

* Variety **---**

* Color

Lot Number

Cancel Accept

Creating Varieties For Planting John Deere GS2

21

9

Use the keyboard to enter in the correct Variety, **example: Variety**. Once you have entered in the variety press **Accept** at the bottom right hand side of the screen.

A screenshot of a virtual keyboard interface. At the top, there is a text input field labeled "Variety A". To the right of the field are two buttons: a "C" button and a back arrow button. Below the field is a full QWERTY keyboard. The "Accept" button, which features a green checkmark icon, is highlighted with a red box at the bottom right of the keyboard area.

10

To change the mapping color for the variety press the **Color** drop down menu. Press **Accept** once the variety has been created.

A screenshot of the "Add/Edit Variety" screen. It contains several input fields: "Brand" (with a dropdown arrow), "* Variety" (with a dropdown arrow and "Variety A" selected), "* Color" (with a red color swatch and a dropdown arrow), and "Lot Number". At the bottom left is a "Cancel" button with a diagonal line icon. At the bottom right is an "Accept" button with a green checkmark icon, which is highlighted with a red box.

11

Once Varieties have been created press the **Home** button to return to the main screen.

A screenshot of the "GreenStar 2 Pro - Documentation" screen. The top has tabs for "Corn" and "New". Below are fields for "*Seed Type" (set to "Corn"), "Prescription" (set to "East_Field_Rx"), and "Implement Name" (set to "----"). There is a color swatch for "Variety A" and an "Add Variety" button. A table shows three rows of seeds per acre (32000 each). Below the table is a bar chart titled "Assign Variety to Rows" showing three colored bars (red, green, blue) across a scale from 0 to 24. At the bottom are "Remove" and "Advanced Settings" buttons. On the right side, there is a vertical menu with icons for Mapping, Guidance, Diagnostics, Equipment, Document, Swath, and Totals. At the bottom right, there is a "Home" button with a house icon, highlighted with a red box. A red arrow points from the text box on the left to this "Home" button. The time "2:02 pm" is displayed at the bottom right.

Changing Varieties Within A Field



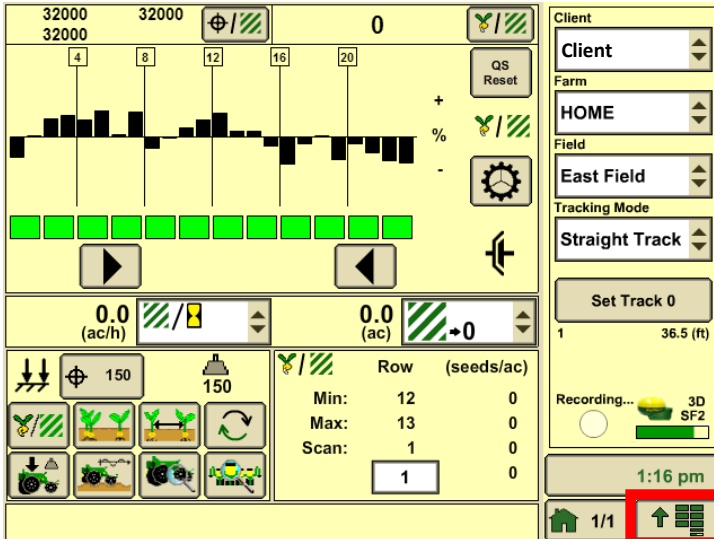
Changing Varieties Within A Field

John Deere GS2

23

1

From the **Planting** screen press the **Menu** button on the bottom right hand side of the screen. **Note: The Menu button is available on every screen.**



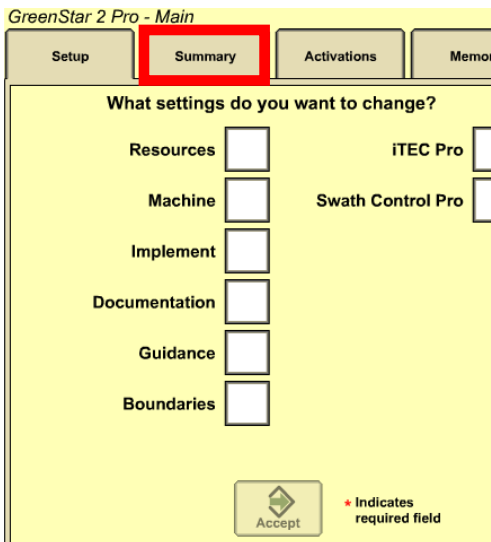
2

In the **Menu** screen press **GS2** button.



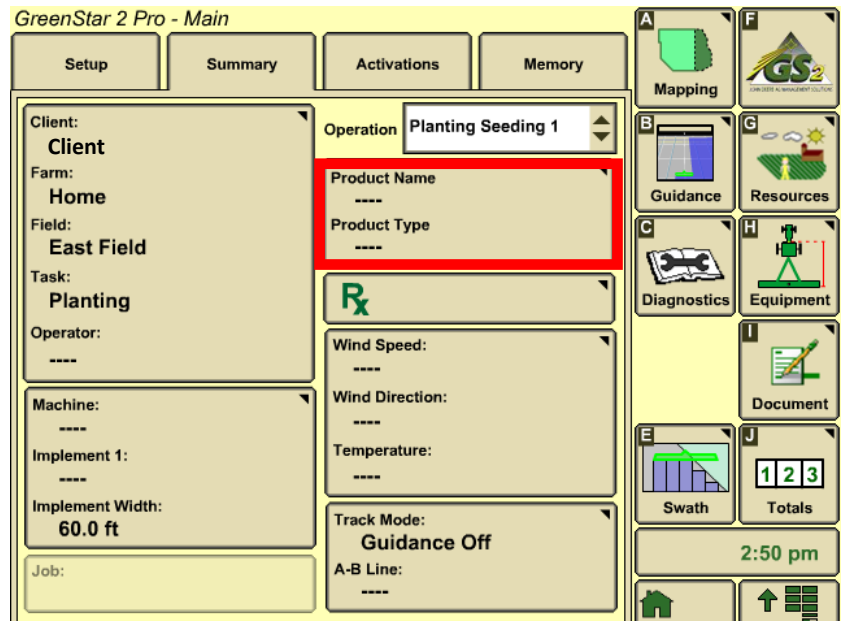
3

Press the **Summary** tab to changes varieties. If unable to see this screen, press the **GS2** button in the upper right corner of the screen.



Be sure the grower information (Client, Farm, Task, etc.) are populated correctly. Press the **Product Name/Product Type** or **Variety** (name used depends on firmware version) field to create a new variety.

Note: The Operation field should read Planting/Seeding.



4

Changing Varieties Within A Field

John Deere GS2

24

5

Note: if the variety you are changing to is not already in the monitor follow the Creating Varieties for Planting section.

Select the different variety, example: Variety A.

GreenStar 2 Pro - Documentation

Corn New

*Seed Type Corn

Prescription East_Field_Rx

Implement Name ----

Variety A

Variety B

Add Variety

Assign Variety to Rows

Remove Advanced Settings Rx

seeds/ac

1	32000
2	32000
3	32000

4 8 12 16 20 24

1 8 2 16 3 24

6

Once the Variety has been change press the **Assign Variety to Rows** button.

GreenStar 2 Pro - Documentation

Corn New

*Seed Type Corn

Prescription East_Field_Rx

Implement Name ----

Variety A

Variety B

Add Variety

Assign Variety to Rows

Remove Advanced Settings Rx

seeds/ac

1	32000
2	32000
3	32000

4 8 12 16 20 24

1 8 2 16 3 24

Mapping GS2

Guidance Resources

Diagnostics Equipment

Document

Swath Totals

2:15 pm

7

Press on the **End Row** box to assign the Variety to every row.

Assign Variety to Rows

Select the variety

* Variety Variety A

Start Row 1

End Row 8

Cancel

4 8 12 16

1 8 2

8

Use the Calculator to enter in the end row of the Variety. Press **Accept** when you are done. Example: this is a 16 row planter putting one Variety in the End Row is 16.

16

1 2 3

4 5 6

7 8 9

. 0 +/-

Accept

Changing Varieties Within A Field

John Deere GS2

25

9

If everything is correct on this page press the **Accept** button.

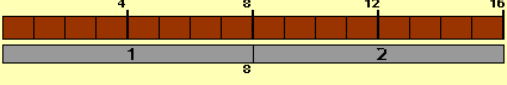
Assign Variety to Rows

Select the variety

* Variety Variety A

Start Row 1

End Row 16



Cancel Accept

Note: Depending the software version and past information in the monitor this step may vary.

10

Once the correct Variety has been chosen and the rows are correct for the variety. Press the **Home** button to return to the main page.

GreenStar - Documentation

Corn New

* Seed Type Corn

Prescription -----

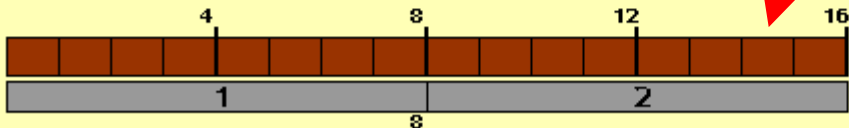
Implement Name 1790 - 16R30 2-pt

Variety A (seeds/ac)

Variety B 1 0

Add Variety 2 0

Assign Variety to Rows



Remove Advanced Settings Rx

A **Mapping**

B **Guidance**

C **Diagnostics**

F **GS2**

G **Resources**

H **Equipment**

I **Document**

J 1 2 3 **Totals**

2:21am

Home ↑

Managing Varieties

The GS2 monitor will continually store all the varieties entered into it. However, it will only display six in the Documentation window where a variety can be assigned to rows. This section will show you how to add in a new variety if more than 6 or more varieties are already stored in the monitor. The only way to completely erase all the varieties out of the monitor is using the John Deere APEX software. Your John Deere dealer should be able to help support this.



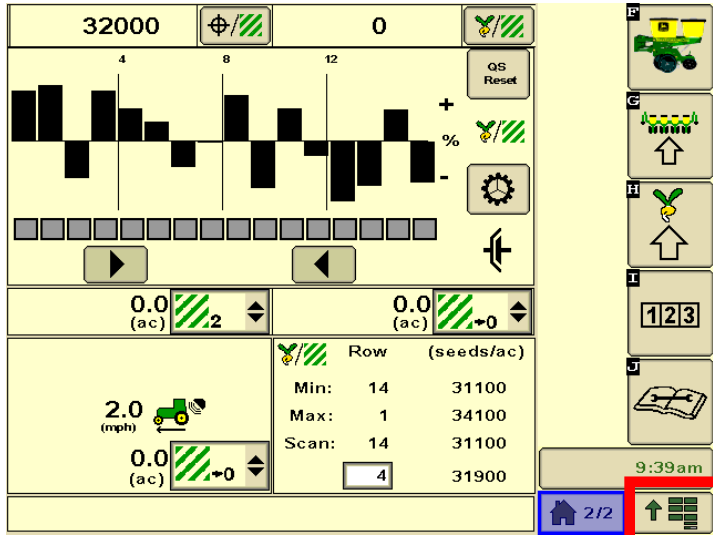
Managing Varieties

John Deere GS2

27

1

From the **Planting** screen press the **Menu** button on the bottom right hand side of the screen. **Note: The Menu button is available on every screen.**



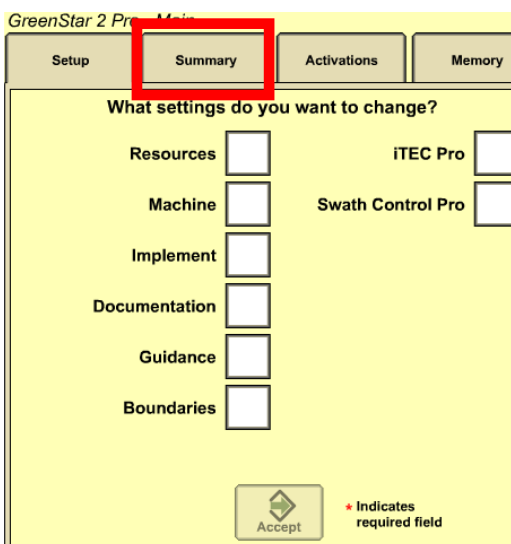
2

In the **Menu** screen press **GS2** button.



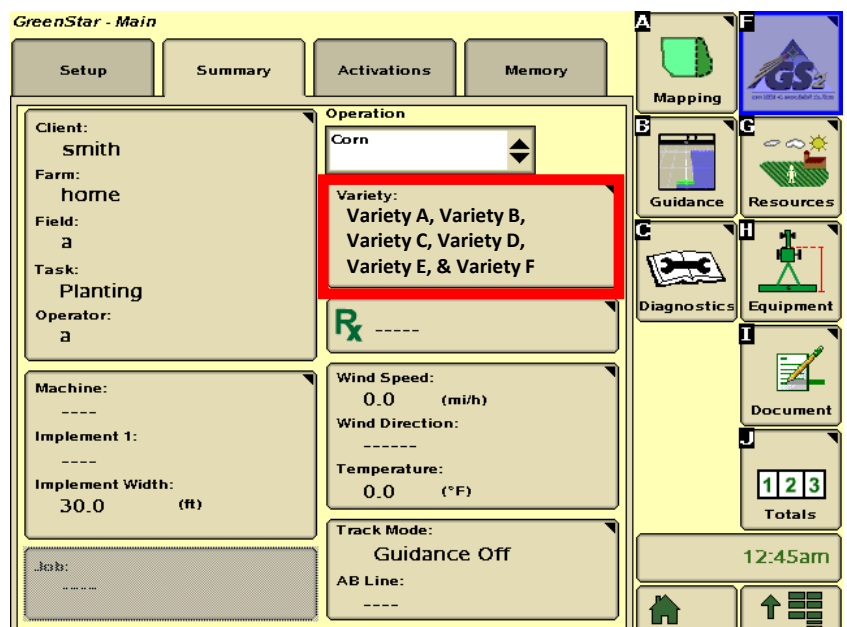
3

Press the **Summary** tab to changes varieties. If unable to see this screen, press the **GS2** button in the upper right corner of the screen.



4

Be sure the grower information (Client, Farm, Task, etc.) are populated correctly. **Press the Product Name/Product Type or Variety** (name used depends on firmware version) field to create a new variety. **Note: The Operation field should read Planting/Seeding.**



5 This screen will display the 6 varieties that were most recently used. If you wish to add a variety that is not already in the monitor or not displayed here press to select a variety to replace.

Note: The variety you are replacing will still be available in the monitor if needed in the future.

The screenshot shows the 'GreenStar - Documentation' screen. At the top, there are two tabs: 'Corn' (selected) and 'New'. Below the tabs, there is a section for 'Seed Type' with a dropdown menu set to 'Corn'. Below that is a 'Prescription' field with a dashed line. Then, there is an 'Implement Name' field with a dashed line. Below these fields, there are six buttons representing different varieties: 'Variety A' (yellow), 'Variety B' (brown), 'Variety C' (cyan), 'Variety D' (orange), 'Variety E' (purple), and 'Variety F' (dark brown). A red box highlights the 'Variety A' button. To the right of these buttons is a 'seeds/ac' field with a value of '0'. Below the variety buttons is a section titled 'Assign Variety to Rows' with a row of 16 boxes. The first box is highlighted in brown. Below this row is a 'Remove' button, an 'Advanced Settings' button, and a green 'Rx' button. On the right side of the screen, there is a vertical menu with icons for 'Mapping', 'Guidance', 'Diagnostics', 'Equipment', 'Resources', and 'Document'. At the bottom right, there is a 'Totals' section with three boxes containing the numbers '1', '2', and '3'. Below this is a clock showing '12:47am' and a home button.

6 In the **Add/Edit Variety** screen, select the brand by pressing on the **Brand** drop down menu. If the correct Brand is present, press to select it and skip step 7(keyboard to add brand). If the correct brand is not listed press **New**.

The screenshot shows the 'Add/Edit Variety' screen. It has a dark background. At the top, there is a title 'Add/Edit Variety'. Below the title, there are several fields: 'Brand' (with a dropdown menu), 'Variety' (with a dropdown menu), 'Color' (with a dropdown menu), and 'Lot Number' (with a text input field). Below these fields, there is a note: '*Indicates required field'. At the bottom left, there is a 'Cancel' button. At the bottom right, there is an 'Accept' button. The time '11:06am' is displayed at the bottom right.

Using the keyboard type in the correct brand and press **Accept**.

The screenshot shows a virtual keyboard interface. At the top, there is a 'Brand' text input field. To the right of the field are two buttons: 'C' and a back arrow. Below the field is a full QWERTY keyboard. The 'r' key is highlighted in blue. At the bottom right of the keyboard, there are two buttons: 'Cancel' and 'Accept'. The 'Accept' button is highlighted in red.

8

To select the correct variety press on the **Variety** drop down menu. If the desired variety is listed select it and skip step 9 (keyboard to add variety). If the desired variety is not listed press **New**.

9

Using the keyboard enter the desired variety, **example: Variety H**, and press **Accept**.

11

10

If all the information in the **Add/Edit Variety** screen is correct press **Accept**.

You will be returned to the Documentation screen where you can assign the new varieties to specific rows on the planter.

Managing Varieties

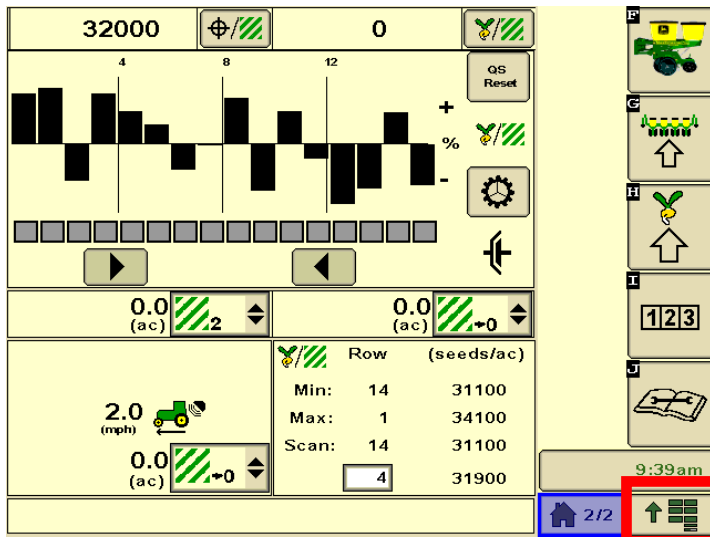
John Deere GS2

30

There are two ways to remove the 6 varieties from the Green Star-Documentation screen, however neither will remove the varieties completely from the monitor so they will still show in the variety drop down screens. These steps would be good to consider at the end of each planting season. The first option is outlined below.

1

From the **Planting** screen press the **Menu** button on the bottom right hand side of the screen. **Note: The Menu button is available on every screen.**



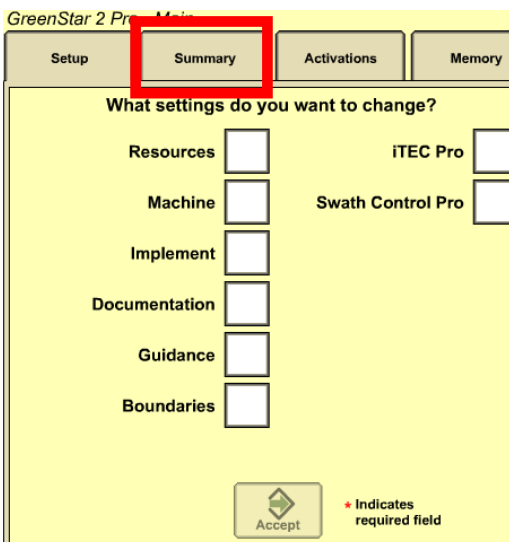
2

In the **Menu** screen press **GS2** button.

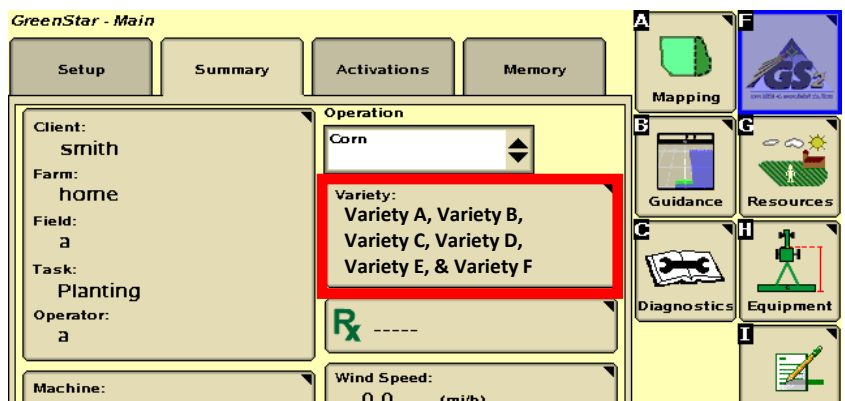


3

Press the **Summary** tab to changes varieties. If unable to see this screen, press the **GS2** button in the upper right corner of the screen.



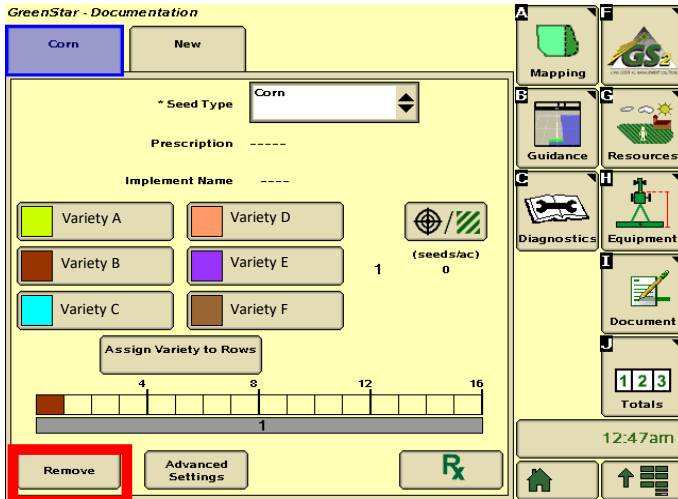
Be sure the grower information (Client, Farm, Task, etc.) are populated correctly. Press the **Product Name/Product Type** or **Variety** (name used depends on software) field to create a new variety. **Note: The Operation field should read Planting/Seeding.**



4

5

Press the **Remove** icon at the bottom of the screen. This is going to remove the current operation from the monitor.



6

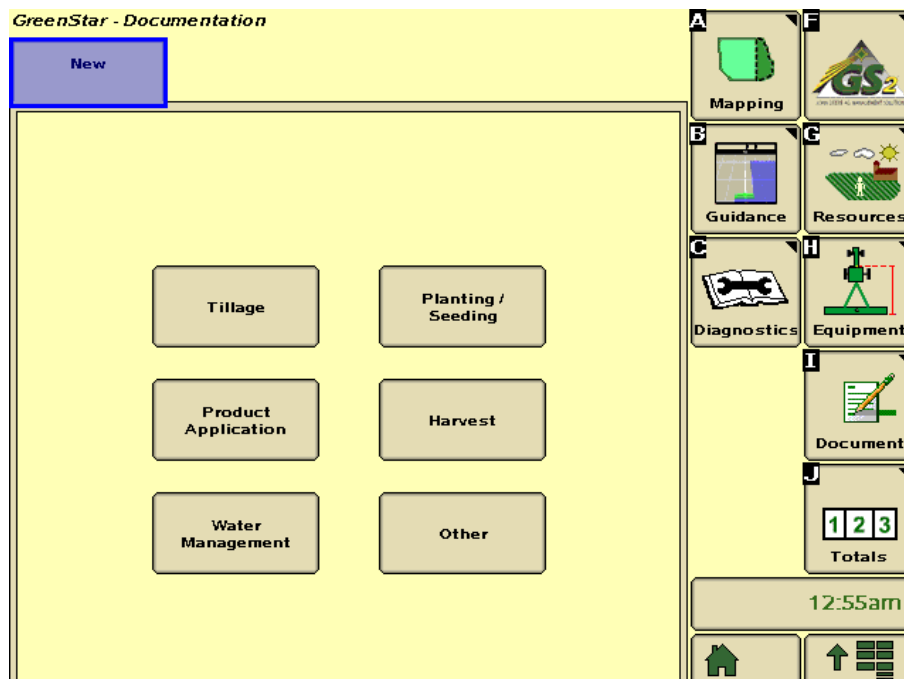
Press **Accept** to complete the action.



7

This has removed the operation. The grower should be able to set up a new configuration if needed.

Note: the previous varieties will still appear in the variety drop down screen in the Add/Edit Variety window.



The second option for removing all the varieties from the current operation without completely removing the operation is to simply switch seeds and then switch back to what you are planting. Follow steps 1-4 on the previous page then return here to complete the action.

5 Press the **Seed Type** field in the Green Star Documentation screen.

The screenshot shows the 'GreenStar - Documentation' screen. At the top, there are tabs for 'Corn' and 'New'. Below this, the 'Seed Type' field is highlighted with a red box and contains the text 'Corn'. To the right of the 'Seed Type' field is a dropdown arrow. Below the 'Seed Type' field is a 'Prescription' field with a dashed line. Further down is an 'Implement Name' field with a dashed line. Below these fields are six colored squares representing different varieties: Variety A (yellow), Variety B (orange), Variety C (cyan), Variety D (red), Variety E (purple), and Variety F (brown). To the right of these squares is a 'seeds/ac' field with a value of 1. Below the variety squares is a bar chart labeled 'Assign Variety to Rows' with a scale from 0 to 16. At the bottom of the screen are buttons for 'Remove', 'Advanced Settings', and a green 'Rx' button. On the right side of the screen is a vertical toolbar with icons for Mapping, Guidance, Diagnostics, Equipment, Resources, and Document. At the bottom right, there is a 'Totals' section with three small boxes containing the numbers 1, 2, and 3, and a timestamp of 12:47am.

6 From the list, press to select another type of seed that you are not using, **example:** Clover.

The screenshot shows a vertical list of seed types. The list includes: Corn, Barley (Euro Wtr), Canola, Chickpeas, Clover, Corn, Corn (Euro), Corn Cob Mix, Corn Silage, and Cotton. The 'Clover' entry is highlighted with a red box. To the right of the list is a vertical toolbar with an upward arrow at the top and a downward arrow at the bottom.

7 You will be returned to the Green Star Documentation screen. Press to select the Seed Type field again.

The screenshot shows the 'GreenStar - Documentation' screen. At the top, there are tabs for 'Clover' and 'New'. Below this, the 'Seed Type' field is highlighted with a red box and contains the text 'Clover'. To the right of the 'Seed Type' field is a dropdown arrow. Below the 'Seed Type' field is a 'Prescription' field with a dashed line. Further down is an 'Implement Name' field with a dashed line. Below these fields is an 'Add Variety' button. To the right of this button is a 'seeds/ac' field with a value of 1. Below the 'Add Variety' button is a bar chart labeled 'Assign Variety to Rows' with a scale from 0 to 16. At the bottom of the screen are buttons for 'Remove', 'Advanced Settings', and a green 'Rx' button. On the right side of the screen is a vertical toolbar with icons for Mapping, Guidance, Diagnostics, Equipment, Resources, and Document. At the bottom right, there is a 'Totals' section with three small boxes containing the numbers 1, 2, and 3, and a timestamp of 12:56am.

8

From the list re-select by pressing the crop type you will be planting.

10

Notice how all the varieties in this screen have been removed. To re-add new varieties follow the steps outlined in the Creating Varieties For Planting section of this document.

Note: the previous varieties will still appear in the variety drop down screen in the Add/Edit Variety window.

Cleaning up Products



Cleaning up Products

John Deere GS2

To clean up products from the display, the setup card will need to be loaded into John Deere's Apex software program. Since this requires a full setup of the monitor, please contact a local dealer for support.

*Setting Up Split Planter
Treatment Data*



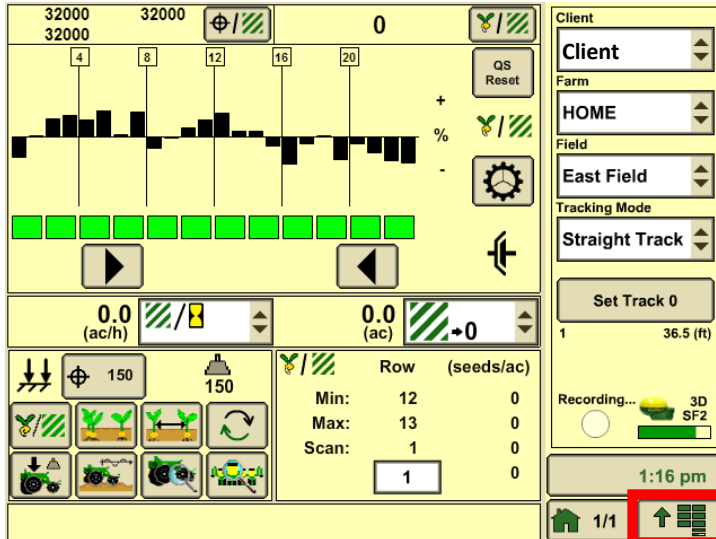
Setting Up Split Planter Treatment Data

John Deere GS2

37

1

From the **Planting** screen press the **Menu** button on the bottom right hand side of the screen. **Note: The Menu button is available on every screen.**



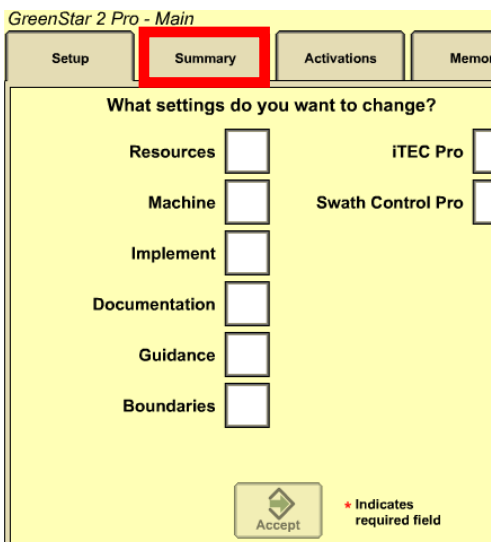
2

In the **Menu** screen press **GS2** button.



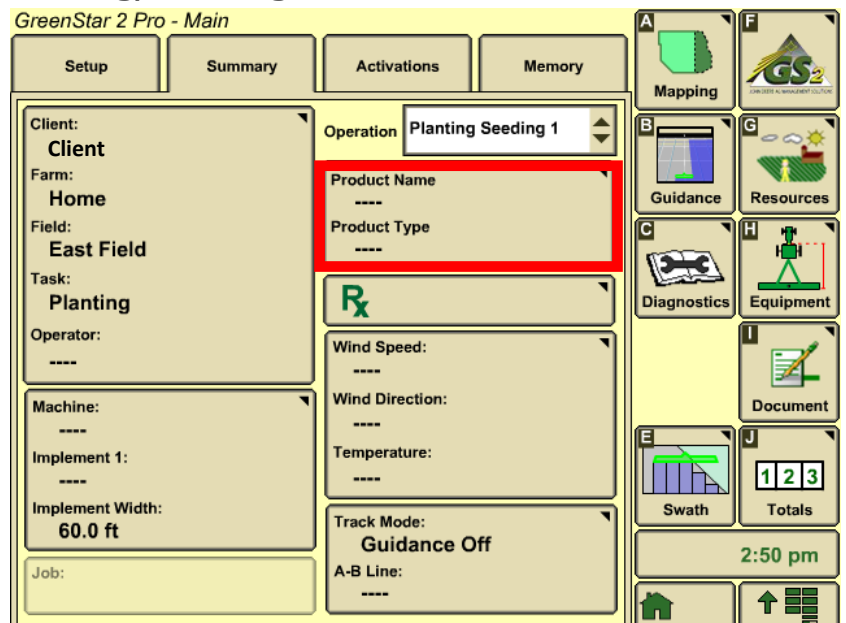
3

Press the **Summary** tab to changes varieties. If unable to see this screen, press the **GS2** button in the upper right corner of the screen.



Be sure the grower information (Client, Farm, Task, etc.) are populated correctly. Press the **Product Name/Product Type** or **Variety** (name used depends on firmware version) field to create a new variety.

Note: The Operation field should read Planting/Seeding.



4

Setting Up Split Planter Treatment Data

John Deere GS2

38

5

To add a Split Variety to the planter press to select an additional variety.

GreenStar - Documentation

Corn New

* Seed Type Corn

Prescription -----

Implement Name 1790 - 16R30 2-pt

Variety A (seeds/ac) 1 0

Variety B (seeds/ac) 2 0

Add Variety

Assign Variety to Rows

4 8 12 16

1 8 2

Remove Advanced Settings Rx

Mapping GS2 Guidance Resources Diagnostics Equipment Document Totals 2:36am

6

Press **Accept** when you select the correct variety.

Add/Edit Variety

Brand Brand

* Variety Variety B

* Color

Lot Number

*Indicates required field

Cancel Accept

7

To Setup the correct rows for each variety press **Assign Variety to Rows**.

GreenStar - Documentation

Corn New

* Seed Type Corn

Prescription -----

Implement Name 1790 - 16R30 2-pt

Variety A (seeds/ac) 1 0

Variety B (seeds/ac) 2 0

Add Variety

Assign Variety to Rows

4 8 12 16

1 8 2

Remove Advanced Settings Rx

Mapping GS2 Guidance Resources Diagnostics Equipment Document Totals 2:36am

8

Select the **Variety** for the first section if the End Row isn't correct use the calculator to enter in the correct value. Press the **Next** icon to change to the next section. **Note: The planter sections are setup left to right.**

Assign Variety to Rows

Select the variety

* Variety Variety A

Start Row 1

End Row 8

4 8 12 16

1 8 2

Cancel Next

9

Press the **Variety** for the section if the End Row isn't correct Use the Calculator to enter in the correct value. Press the **Next** icon to change to the next section, if there is no more sections press **Accept**.

10

The varieties should be split to there individual rows. **Note: Use the Select Prescription handout to add the a VRS map.**

Exporting As-Applied Planting Files



1

Open the door housing the compact flash card.

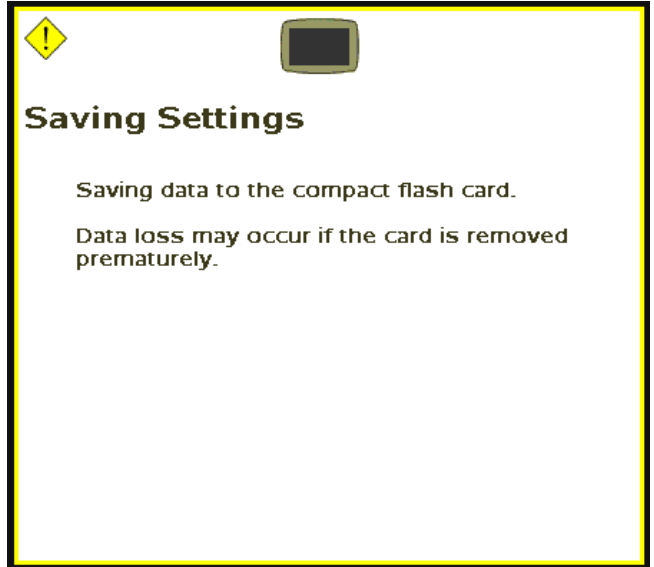


2

The monitor will automatically begin saving needed data to the card to prepare the card for removal. **Note: Do not remove the card until prompted to!**

3

Once prompted to remove the card press the grey button below the card and pull it out.



Since the card is required to operate the monitor DO NOT take the card from the grower. Make a copy of it and return the card to the monitor.

Troubleshooting



Question: Does it matter what the seeding rate units are?

Answer: Yes, Shape files for the GS2 and GS2 displays require units of Seeds Per Acre. Prescription shapefiles with units of thousands of seeds per acre or kseeds per acre will not work correctly.

Content written by Christopher Murphy, Program Coordinator II, Iowa State University Department of Agricultural and Biosystems Engineering.

The information provided is educational in nature. No endorsement of products or firms is intended, nor is criticism implied of those not mentioned. Iowa State University makes no warranties, express or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.

IOWA STATE UNIVERSITY

Department of Agricultural and Biosystems Engineering

Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran.

Inquiries regarding non-discrimination policies may be directed to Office of Equal Opportunity, 3350 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, Tel. 515 294-7612, email eooffice@iastate.edu.