

Samples List

BMS 16.0-17.0 Manual

Genotype Samples Manage Samples Browse Search Export Sample List Edit Plate Details Import Plate Details Related

Genotype Samples

This functionality allows users to identify and sample individual plants within a plot for genotyping. Samples are giving unique IDs that are used to match genotype data to the plant and plot from which it was sampled. Genotype samples are handled separately from sub-sampling for repeated measures and time-series phenotypic data.

 From a study where <u>selections</u> have been made, choose 'Create sample list' from the 'Plant level options' of the Actions menu

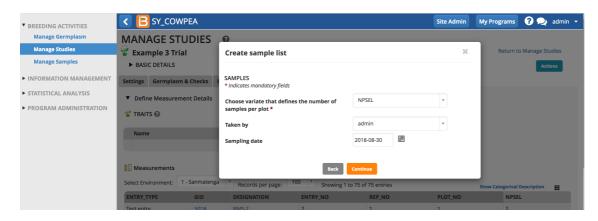
BREEDING ACTIVITIES	🔇 🖪 SY_0	COWPEA					Site Admin	My Programs	? 契 admin
Manage Germplasm	MANAGE	STUDIES	0						
Manage Studies	👻 Example 3	3 Trial	Save					Return to	o Manage Studies
Manage Samples	► BASIC DETA								Actions
INFORMATION MANAGEMENT	Settings Germ	plasm & Checks	Environments	Experimental Desig	n Measurements			Save St	
STATISTICAL ANALYSIS	V Define Mea	urement Details				Add		-	and planning options
ROGRAM ADMINISTRATION		Surement Details				Add			nap options)
	🍟 TRAITS 🔞							Data co	ollection options)
	Name			Description	Input Variables		Create sample		evel options
	Name			Description	input variables	•		Advand	ce study options »
								Classe	
								Close s Delete	
	👔 🗄 Measureme	nts							
	1 Measureme		ga 🔻 Records	s per page: 100 🔻	Showing 1 to 75 of	75 entries			study
			ga • Records	s per page:	Showing 1 to 75 of	75 entries REP_NO	PLOT_NO	Delete	study Description
	Select Environme	nt: 1 - Sanmaten	Records	s per page:	Showing 1 to 75 of		PLOT_NO 1	Delete Show Categorical I	study Description
	Select Environme	nt: 1 - Sanmaten GID	DESIGNA	TION ENTI	Showing 1 to 75 of	REP_NO	_	Delete Show Categorical I NPSE	study Description
	Select Environme ENTRY_TYPE Test entry	nt: 1 - Sanmaten GID 5018	DESIGNA BMS-2	TION ENTI 2	Showing 1 to 75 of	REP_NO	1	Show Categorical I NPSE	study Description
	Select Environme ENTRY_TYPE Test entry Test entry	nt: 1 - Sanmaten GID 5018 5040	DESIGNA BMS-2 BMS-24	TION ENTI 2 24	Showing 1 to 75 of	REP_NO 1 1	1	Show Categorical I NPSE	study Description
	Select Environme ENTRY_TYPE Test entry Test entry Test entry	nt: 1 - Sanmaten GID 5018 5040 5023	BMS-2 BMS-24 BMS-7	TION ENTI 2 24 7	Showing 1 to 75 of	REP_NO 1 1 1	1 2 3	Show Categorical M NPSE 2 1	study Description

In this example NPSEL (number of plants selected) indicates how many plants from each plot will be sampled.

• Choose the instances you would like to sample.

BREEDING ACTIVITIES	< 📔 sy_cov	VPEA	Site Admin	My Programs	🥐 喿 admin 🝷				
Manage Germplasm	MANAGE ST	UDIES	0						
Manage Studies	👻 Example 3 Tr		Create sar	nple list			×	Return to	o Manage Studies
Manage Samples	► BASIC DETAILS								Actions
► INFORMATION MANAGEMENT	Settings Germplas	m & Checks	Select the loca	tions you would like to sam	ole:				
STATISTICAL ANALYSIS	Define Measurer	ment Details	10 •						
► PROGRAM ADMINISTRATION	🖞 TRAITS 🕑				:	Search:			
	Name			LOCATION_NAME					
				Sanmatenga - (UV70)					
				Puerto Rico Territory - (I	JS72)				
	👔 🗄 Measurements		Showing 1 to 2	of 2 entries					
	Select Environment:	1 - Sanmatenga	a	< 1 >				how Categorical	Description III
	ENTRY_TYPE	GID						NPSE	L
	Test entry	5018			Continue			2	
	Test entry	5040			eonunde			1	
	Test entry	5023		7	1		3		

• Choose the variate that defines the number of samples (in this case NPSEL), and enter the optional details about collector and date.



· Save the sample list.

BREEDING ACTIVITIES		EA			Site Admin	My Program	ns ? ᆽ admin 👻
Manage Germplasm	MANAGE STU	DIES @					
Manage Studies	👻 Example 3 Trial					х	n to Manage Studies
Manage Samples	► BASIC DETAILS						Actions
► INFORMATION MANAGEMENT	Settings Germplasm &	SAVE SAMPLE LIST * Indicates mandatory fields					e list] 🗙
STATISTICAL ANALYSIS	Imported Crosses: [dups r	List Location	Ð 🔊 🗘	List Details			
► PROGRAM ADMINISTRATION	Define Measurement	Crop lists		List Name:*	Example Trial 3 Lab Sa	mples	
	🛫 TRAITS 🕢	Sample lists		List Owner:	Mariano Crimi		
	Name			List Description:	for SNP genotyping		
	Measurements			List Type:	SAMPLE LIST		
	Select Environment: 1 -			List Date:*	2018-08-30		cal Description
	ENTRY_TYPE			Notes:			PSEL
	Test entry						
	Test entry						
	Test entry						
	Test entry						
	Test entry	DMC 45	Cance	Save	c		

The sample list is now available in the associated study and the sample details are available with other germplasm details.

• Select any germplasm designation link.

BREEDING ACTIVITIES	K 🔁 SY_COWP	ΈA					Site Admin	My Programs	? 喿 admi
Manage Germplasm	MANAGE STU	DIES 0							
Manage Studies	👻 Example 3 Trial	Save						Return to	o Manage Studies
Manage Samples	► BASIC DETAILS	_							Actions
INFORMATION MANAGEMENT	Settings Germplasm 8	Checks Environments	Experimenta	l Design Measu	rements Sa	ample List: [Example	Trial 3 Lab Samp	oles] 🗙	
STATISTICAL ANALYSIS	Sample list: Example	Trial 3 Lab Note	s:						
PROGRAM ADMINISTRATION	Samples								nple list Actions
	Total Entries: 5								
	100 • Showing 1	to 5 of 5 entries						Export	sample list
	SAMPLE_ENTRY	DESIGNATION	PLOT_NO	PLANT_NO	SAMPLE_	NAME TAP	EN_BY	SAMPLING_DAT	re
	1	BMS-2	1	1	BMS-2:2	Adr	nin Admin	30/08/2018	
	2	BMS-2	1	2	BMS-2:3	Adr	nin Admin	30/08/2018	
	3	BMS-24	2	1	BMS-24:1	Adr	nin Admin	30/08/2018	
	4	BMS-25	4	1	BMS-25:1	Adr	nin Admin	30/08/2018	
	5	BMS-11	5	1	BMS-11:1	Adr	nin Admin	30/08/2018	
				< 1					
				< 1	>				

Review sample details in germplasm details pop-up.

• Export the sample list as an .xls file.

BREEDING ACTIVITIES	< 🔁 SY_COWF	PEA				Site Admin	My Programs	? 契 admii
Manage Germplasm	MANAGE STU	JDIES @						
Manage Studies	👻 Example 3 Trial	Save					Return to	Manage Studies
Manage Samples	► BASIC DETAILS							Actions
INFORMATION MANAGEMENT	Settings Germplasm	& Checks Environments	Experimental Des	ign Measurements	Sample List: [Exam	ple Trial 3 Lab Samp	les] 🗙	
TATISTICAL ANALYSIS	Sample list: Example	Trial 3 Lab Notes:						
PROGRAM ADMINISTRATION	Samples Total Entries: 5							nple list Actions
	100 Showing 1	to 5 of 5 entries						
	SAMPLE_ENTRY	DESIGNATION	PLOT_NO P	LANT_NO SAM	MPLE_NAME	FAKEN_BY	SAMPLING_DAT	E
	SAMPLE_ENTRY	DESIGNATION BMS-2	PLOT_NO P	-	_	FAKEN_BY Admin Admin	SAMPLING_DAT 30/08/2018	E
	SAMPLE_ENTRY 1 2		PLOT_NO P 1 1 1 2	BM	S-2:2	-	_	E
	1	BMS-2	1 1	BM	S-2:2 /	Admin Admin	30/08/2018	E
	1 2	BMS-2 BMS-2	1 1 1 2	BM:	S-2:2 // S-2:3 // S-24:1 //	- Admin Admin Admin Admin	30/08/2018 30/08/2018	E

• Review the sample list in Excel. Sample_NAME and SAMPLE_UID will be needed for the eventualupload of genotyping data.

	А	В	с	D	E	F	G	н	1	1	к	L	м
1	SAMPLE_ENTRY	DESIGNATION	PLOT_NO	PLANT_NO	SAMPLE_NAME	TAKEN_BY	SAMPLING_DATE	SAMPLE_UID					
2	1	BMS-2	1	. 1	BMS-2:2	Admin Admin	30/08/2018	BCYZSLzI7wgdI					
3	2	BMS-2	1	. 2	BMS-2:3	Admin Admin	30/08/2018	BCYZSd8vkwYmS					
4	3	BMS-24	2	1	BMS-24:1	Admin Admin	30/08/2018	BCYZS8V5TgFvu					
5	4	BMS-25	4	1	BMS-25:1	Admin Admin	30/08/2018	BCYZSKmmjdcEA					
6	5	BMS-11	5	1	BMS-11:1	Admin Admin	30/08/2018	BCYZSnzGiDL1i					
7													
8													
	Example	ole 3 Trial-Examp	le Trial 3	+									

Sample information can be reviewed for individual germplasm from any list in the system. Links from the sample table take the user to the study or dataset.

▼ BREEDING ACTIVITIES	K 🖪 SY_M	AIZE					Site Admin My	y Programs	🕜 喿 adm
Manage Germplasm	MANAGE	GERMP	LASM 0						
Manage Nurseries	Viev Germpl	asm Details:	: BMS-1 (GID: 1	5623)					×
Manage Trials									
► INFORMATION MANAGEMENT	Brows							+	Add to list
STATISTICAL ANALYSIS	100	AMES							
PROGRAM ADMINISTRATION	► IN	VENTORY I	NFORMATIO	N					
	Tota	STS							r
	✓ ▼ SA	MPLES							
	SAM	APLE ID	SAMPLE LIST	STUDY NAME	PLOT ID	PLANT ID	GENOTYPING DATASET		
	CYS	5DS5TDXOePt	100x3 sample list	Genotyping 4K Markers	CY5DPhkY3r4sE	CY5DLjQhxsglu	4000markers 100 entries,2000M x	100 geno	
	CYS	DSVEFOJ8NK	100x3 sample list	Genotyping 4K Markers	CY5DPhbMXqDY6	CY5DLFAQXW78s			
	CY5	5DSvhugIS1P	100x3 sample list	Genotyping 4K Markers	CY5DPG6qbf621	CY5DLouAFCDLi			

In this example, 3 plants belonging to germplasm BMS-1 have been sampled. The first plant was genotyped twice, once with a set of 4000 markers and once with a set of 2000 markers.

BREEDING ACTIVITIES	SY_COWPEA			Site Adr	min My Programs	? ᆽ admin 👻
Manage Germplasm	MANAGE SAMPLES					
Manage Studies		Open sample list		×		
Manage Samples	Browse or search for a list of samples to w				£ 🛛 🗘	
► INFORMATION MANAGEMENT						
STATISTICAL ANALYSIS		NAME	OWNER	DESCRIPTION		
		▼ □Crop lists				
PROGRAM ADMINISTRATION		▼ □Sample lists				
		10 sample sets	Admin Admin			
		1000 germ 100NPSEL	Admin Admin			
		100germ 10NPSEL	Admin Admin			
		🖹 100К	Admin Admin			
		Aphid Res Screen	Admin Admin	for genotyping and identification of aphie	d resistance alleles	
		MC1	Admin Admin			
		SNP Samples	Admin Admin	2018		
				Cancel Ok		
					_	

Manage Samples

Browse or search for sample lists.





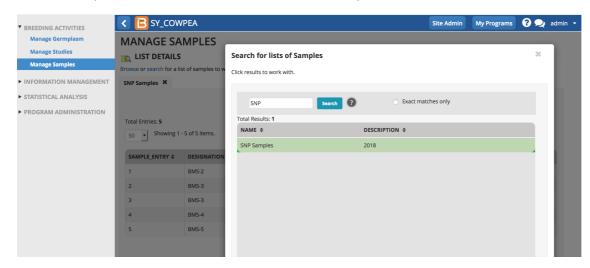
Browse

• Select Browse. Highlight the list of interest from the directory and select OK.

BREEDING ACTIVITIES	< 🖪 SY_COWPEA			Site Admin	My Programs	? 👤 admin 👻
Manage Germplasm	MANAGE SAMPLES					
Manage Studies	LIST DETAILS	Open sample list		×		
Manage Samples	Browse or search for a list of samples to wor	o pon o ann pro noc		000		
► INFORMATION MANAGEMENT		▼ □Crop lists			- 1	
STATISTICAL ANALYSIS		Cample lists				
PROGRAM ADMINISTRATION		10 sample sets	Admin Admin			
		1000 germ 100NPSEL	Admin Admin			
		100germ 10NPSEL	Admin Admin			
		🖹 100K	Admin Admin			
		Aphid Res Screen	Admin Admin	for genotyping and identification of aphie	d resistance	
		Design meeting	Admin Admin			
		Example Trial 3 Lab Samples	Admin Admin	for SNP genotyping		
		MC1	Admin Admin			
		SNP Samples	Admin Admin	2018		
			Cancel	Ok		

Search

• Enter a partial or exact list name to search the directory. Select the list of interest and close the pop-up.



Export Sample List

• Export list (.csv) from the Actions menu.

BREEDING ACTIVITIES	< 🖪 sy_cow	PEA					Site Admin	My Programs	? ᆽ admin
Manage Germplasm Manage Studies	MANAGE SA								
Manage Samples	Browse or search for a lis	t of samples to work w	ith.						
INFORMATION MANAGEMENT	Example Trial 3 Lab Sa	mples 🗙							
STATISTICAL ANALYSIS									
PROGRAM ADMINISTRATION									
	Total Entries: 5								Actions
	50 Showing 1 -	5 of 5 items.						Export list Import Plate li	nformation
	SAMPLE_ENTRY \$	DESIGNATION \$	GID ¢	SAMPLE_NAME \$	TAKEN_BY \$	SAMPLING_DATE \$	SAMPLE_UID \$	PLATE_ID \$	WELL \$
	1	BMS-2	5018	BMS-2:2	Admin Admin	30/08/2018	BCYZSLzl7wgdl		
	2	BMS-2	5018	BMS-2:3	Admin Admin	30/08/2018	BCYZSd8vkwYm	s	
	3	BMS-24	5040	BMS-24:1	Admin Admin	30/08/2018	BCYZS8V5TgFvu		
	4	BMS-25	5041	BMS-25:1	Admin Admin	30/08/2018	BCYZSKmmjdcE/	4	
	5	BMS-11	5027	BMS-11:1	Admin Admin	30/08/2018	BCYZSnzGiDL1i		
					ee e 1 > >>				

Edit Plate Details

• Open the .csv in a program like Excel. Add columns PLATE_ID and WELL to record plate information. Fill the PLATE_ID and WELL details. Save the .csv file.

	A	В	с	D	E	F	G	н	1	J	к	L	м
1	SAMPLE_ENTRY	DESIGNATION	SAMPLE_NAME	TAKEN_BY	SAMPLING_DATE	SAMPLE_UID	PLATE_ID	WELL	GID				
2	1	BMS-2	BMS-2:2	Admin Admin	30/08/2018	BCYZSLzl7wgdl	83018	A1	5018				
3	2	BMS-2	BMS-2:3	Admin Admin	30/08/2018	BCYZSd8vkwYmS	83018	A2	5018				
4	3	BMS-24	BMS-24:1	Admin Admin	30/08/2018	BCYZS8V5TgFvu	83018	A3	5040				
5	4	BMS-25	BMS-25:1	Admin Admin	30/08/2018	BCYZSKmmjdcEA	83018	A4	5041				
6	5	BMS-11	BMS-11:1	Admin Admin	30/08/2018	BCYZSnzGiDL1i	83018	A5	5027				
7													
8		le Trial 3 Lab Sa											

Import Plate Details

• Select .csv file to import.

BREEDING ACTIVITIES	K B SY_COWPEA	Site Admin	My Programs	? 👤 admin 🝷	
Manage Germplasm	MANAGE SAMPLES			_	
Manage Studies		Select Data File to Import	:	×	
Manage Samples	Browse or search for a list of samples to wor	• * indicates a mandatory field			
► INFORMATION MANAGEMENT	Example Trial 3 Lab Samples 🗱	Please specify the format you are importing:*	csv •		
STATISTICAL ANALYSIS		Selected import file: Example Trial 3 Lab Samples.csv Clear			
PROGRAM ADMINISTRATION			•		
	Total Entries: 5	Cancel Import			Actions
	50 Showing 1 - 5 of 5 items.				

• Confirm the mapping of column headings and Proceed.

▼ BREEDING ACTIVITIES	< B SY_COWPEA	Site Admin	My Programs	🥐 喿 admir		
Manage Germplasm	MANAGE SAMPLES				-	
Manage Studies	EIST DETAILS	Select Mapping		ж		
Manage Samples	Browse or search for a list of samples to wo	* indicates a mandatory field				
► INFORMATION MANAGEMENT	Example Trial 3 Lab Samples 🛛 🗮	Please specify the header for SAMPLE_UID: *	SAMPLE_UID	-		
► STATISTICAL ANALYSIS		Please specify the header for PLATE_ID: *	PLATE_ID	-		
PROGRAM ADMINISTRATION	Total Entries: 5	Please specify the header for WELL: *	WELL	*		Actions
	50 Showing 1 - 5 of 5 items.	Back Proceed				
	SAMPLE_ENTRY	GID ¢ SAMPLE_NAME ¢ TAKEN_BY ¢ SAM	MPLING_DATE \$	SAMPLE_UID \$	PLATE_ID \$	WELL \$
	1 BMS-2	5018 BMS-2·2 Admin Admin 30/	08/2018	RCYZSI zl7wgdl		

Review the plate details.

BREEDING ACTIVITIES	< 🖪 sy_cow	PEA					Site Admin	My Programs	? 契 admi		
Manage Germplasm Manage Studies	MANAGE SA										
Manage Samples	IST LIST DETAILS Browse or search for a list of samples to work with.										
INFORMATION MANAGEMENT	Example Trial 3 Lab Samples 🗶										
STATISTICAL ANALYSIS											
 PROGRAM ADMINISTRATION 	Total Entries: 5	5 of 5 items.							Actions		
	SAMPLE_ENTRY \$	DESIGNATION \$	GID \$	SAMPLE_NAME \$	TAKEN_BY \$	SAMPLING_DATE \$	SAMPLE_UID \$	PLATE_ID \$	WELL \$		
	1	BMS-2	5018	BMS-2:2	Admin Admin	30/08/2018	BCYZSLzl7wgdI	83018	A1		
	2	BMS-2	5018	BMS-2:3	Admin Admin	30/08/2018	BCYZSd8vkwYmS	83018	A2		
	2 3	BMS-2 BMS-24	5018 5040	BMS-2:3 BMS-24:1	Admin Admin Admin Admin	30/08/2018 30/08/2018	BCYZSd8vkwYmS BCYZS8V5TgFvu	83018 83018	A2 A3		
								83018			

Related

- <u>Advancement</u>
 <u>Manage Genotype Data</u>