

CIMMYT Automation File Interfaces

IWIS

IWIS files provide data that is loaded into the cimmyt database plots and germplasm tables.

Filename structure:

T66_<TID>_001.xlsx Example: T66_047384_001.xls

File structure:

Row 1 Col A: 'TID' Row 1 Col 2:
Row 2 Col A: 'OCC' Row 2 Col 2:
Row 3 Col A: 'Trial Name' Row 3 Col 2:
Row 4 Col A: 'Trial Abbr' Row 4 Col 2:
Row 5 Col A: 'Cycle' Row 5 Col 2:
Row 6 Col A: 'Program' Row 6 Col 2;
Row 7 Blank

Row 8 Column Headings for plot and germplasm data columns:

Column A: 'CID'
Column B: 'SID'
Column C: 'GID'
Column D: 'Cross Name'
Column E: 'Selection History'
Column F: 'Origin (Seed Source) '
Column G: 'Plot'
Column H: 'Rep'
Column I: 'SubBlock'
Column J: 'Entry'

(Columns beyond column J can be ignored.)

Row 9 to EOF: Data values for plot and germplasm tables.

Example File:

	A	B	C	D	E	F	G	H	I	J
1	TRID :	47009								
2	OCC :	1								
3	Trisal Nam:	YTBW_01								
4	Trisal Abbr:	YTBW_01								
5	Cycle :	Y18-19								
6	Program:	BW								
7										
8	CID	SID	GID	Cross Name	Selection History	Origin	Plot	Rep	SubBlock	Entry
9	516361	518	7806808	BORLAUG100 F2014	CMSS06Y00605T-09T0PM-09Y-09Z2TM-09Y-09M-11WGY-0B-0MEX	/0	101	1	1	101
10	590602	82	7627900	STLN/MUNAL #1//2*BORL14	CMSS12B00828T-09T0PY-09M-05Y-42M-0WGY	/0	102	1	1	102
11	636932	66	8497695	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-11Y-0WGY	BV2018PCBW5005	103	1	1	103
12	636932	67	8497696	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-19Y-0WGY	BV2018PCBW5006	104	1	1	104
13	636932	69	8497698	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-25Y-0WGY	BV2018PCBW5008	105	1	1	105
14	636932	70	8497699	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-33Y-0WGY	BV2018PCBW5009	106	1	2	106
15	636932	71	8497700	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-34Y-0WGY	BV2018PCBW5010	107	1	2	107
16	636932	72	8497701	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-35Y-0WGY	BV2018PCBW5011	108	1	2	108
17	636935	28	8497702	BORL14//KACHU/KIRITATI	CMSS14B00004S-09M-09M-09M-1Y-0WGY	BV2018PCBW5012	109	1	2	109
18	636941	75	8497706	BORL14/3/SWSR22T.B./2*BLOUK #1//WBLL1*2/KURUKU	CMSS14B00010S-09M-09M-09M-8Y-0WGY	BV2018PCBW5016	110	1	2	110
19	636941	76	8497707	BORL14/3/SWSR22T.B./2*BLOUK #1//WBLL1*2/KURUKU	CMSS14B00010S-09M-09M-09M-14Y-0WGY	BV2018PCBW5017	111	1	3	111
20	636941	77	8497708	BORL14/3/SWSR22T.B./2*BLOUK #1//WBLL1*2/KURUKU	CMSS14B00010S-09M-09M-09M-18Y-0WGY	BV2018PCBW5018	112	1	3	112
21	636941	78	8497709	BORL14/3/SWSR22T.B./2*BLOUK #1//WBLL1*2/KURUKU	CMSS14B00010S-09M-09M-09M-35Y-0WGY	BV2018PCBW5019	113	1	3	113
22	636942	60	8497710	BORL14/4/KACHU/3/WHEAR//2*PRL/2*PASTOR	CMSS14B00011S-09M-09M-09M-1Y-0WGY	BV2018PCBW5020	114	1	3	114
23	636942	61	8497711	BORL14/4/KACHU/3/WHEAR//2*PRL/2*PASTOR	CMSS14B00011S-09M-09M-09M-28Y-0WGY	BV2018PCBW5021	115	1	3	115
24	636946	26	8497713	MUNAL #1/3/SWSR22T.B./KACHU//2*KACHU	CMSS14B00015S-09M-09M-09M-8Y-0WGY	BV2018PCBW5023	116	1	4	116
25	636950	44	8497714	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-1Y-0WGY	BV2018PCBW5024	117	1	4	117
26	636950	45	8497715	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-7Y-0WGY	BV2018PCBW5025	118	1	4	118
27	636950	47	8497717	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-12Y-0WGY	BV2018PCBW5027	119	1	4	119
28	636950	48	8497718	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-14Y-0WGY	BV2018PCBW5028	120	1	4	120
29	636950	49	8497719	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-16Y-0WGY	BV2018PCBW5029	121	1	5	121
30	636950	51	8497721	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-22Y-0WGY	BV2018PCBW5031	122	1	5	122
31	636950	52	8497722	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-25Y-0WGY	BV2018PCBW5032	123	1	5	123
32	636951	56	8497724	BAJ #1//KENYA SUNBIRD/2*KACHU	CMSS14B00020S-09M-09M-09M-6Y-0WGY	BV2018PCBW5034	124	1	5	124
33	636951	57	8497725	BAJ #1//KENYA SUNBIRD/2*KACHU	CMSS14B00020S-09M-09M-09M-12Y-0WGY	BV2018PCBW5035	125	1	5	125
34	636951	60	8497726	BAJ #1//KENYA SUNBIRD/2*KACHU	CMSS14B00020S-09M-09M-09M-21Y-0WGY	BV2018PCBW5038	126	1	6	126
35	636951	63	8497731	BAJ #1//KENYA SUNBIRD/2*KACHU	CMSS14B00020S-09M-09M-09M-29Y-0WGY	BV2018PCBW5041	127	1	6	127
36	636955	31	8497735	MISR 1/4/KACHU/3/WHEAR//2*PRL/2*PASTOR	CMSS14B00024S-09M-09M-09M-21Y-0WGY	BV2018PCBW5045	128	1	6	128
37	636955	32	8497736	MISR 1/4/KACHU/3/WHEAR//2*PRL/2*PASTOR	CMSS14B00024S-09M-09M-09M-25Y-0WGY	BV2018PCBW5046	129	1	6	129
38	636956	44	8497737	NELOKI/4/KACHU*2/3/ND643//2*PRL/2*PASTOR	CMSS14B00025S-09M-09M-09M-19Y-0WGY	BV2018PCBW5047	130	1	6	130
39	636951	63	8497731	BAJ #1//KENYA SUNBIRD/2*KACHU	CMSS14B00020S-09M-09M-09M-29Y-0WGY	BV2018PCBW5041	131	2	1	127
40	636941	75	8497706	BORL14/3/SWSR22T.B./2*BLOUK #1//WBLL1*2/KURUKU	CMSS14B00010S-09M-09M-09M-7Y-0WGY	BV2018PCBW5016	132	2	1	110
41	590602	82	7627900	STLN/MUNAL #1//2*BORL14	CMSS12B00828T-09T0PY-09M-05Y-42M-0WGY	/0	133	2	1	102
42	636942	61	8497711	BORL14/4/KACHU/3/WHEAR//2*PRL/2*PASTOR	CMSS14B00011S-09M-09M-09M-28Y-0WGY	BV2018PCBW5021	134	2	1	115
43	636941	77	8497708	BORL14/3/SWSR22T.B./2*BLOUK #1//WBLL1*2/KURUKU	CMSS14B00010S-09M-09M-09M-18Y-0WGY	BV2018PCBW5018	135	2	1	112
44	636950	44	8497714	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-1Y-0WGY	BV2018PCBW5024	136	2	2	117
45	636950	52	8497722	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-25Y-0WGY	BV2018PCBW5032	137	2	2	123
46	636952	70	8497699	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-33Y-0WGY	BV2018PCBW5009	138	2	2	106
47	636955	31	8497735	MISR 1/4/KACHU/3/WHEAR//2*PRL/2*PASTOR	CMSS14B00024S-09M-09M-09M-21Y-0WGY	BV2018PCBW5045	139	2	2	128
48	636932	69	8497698	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-25Y-0WGY	BV2018PCBW5008	140	2	2	105
49	636941	78	8497709	BORL14/3/SWSR22T.B./2*BLOUK #1//WBLL1*2/KURUKU	CMSS14B00010S-09M-09M-09M-35Y-0WGY	BV2018PCBW5019	141	2	3	113
50	636942	60	8497710	BORL14/4/KACHU/3/WHEAR//2*PRL/2*PASTOR	CMSS14B00011S-09M-09M-09M-1Y-0WGY	BV2018PCBW5020	142	2	3	114
51	636950	49	8497719	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-16Y-0WGY	BV2018PCBW5029	143	2	3	121
52	636946	26	8497713	MUNAL #1/3/SWSR22T.B./KACHU//2*KACHU	CMSS14B00015S-09M-09M-09M-8Y-0WGY	BV2018PCBW5023	144	2	3	116
53	636951	60	8497726	BAJ #1//KENYA SUNBIRD/2*KACHU	CMSS14B00020S-09M-09M-09M-21Y-0WGY	BV2018PCBW5038	145	2	3	126
54	636932	67	8497696	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-19Y-0WGY	BV2018PCBW5006	146	2	4	104
55	636950	47	8497717	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-12Y-0WGY	BV2018PCBW5027	147	2	4	119
56	516361	518	7806808	BORLAUG100 F2014	CMSS06Y00605T-09T0PM-09Y-09Z2TM-09Y-09M-11WGY-0B-0MEX	/0	148	2	4	101
57	636932	71	8497700	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-34Y-0WGY	BV2018PCBW5010	149	2	4	107
58	636955	32	8497736	MISR 1/4/KACHU/3/WHEAR//2*PRL/2*PASTOR	CMSS14B00024S-09M-09M-09M-25Y-0WGY	BV2018PCBW5046	150	2	4	129
59	636950	51	8497721	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-22Y-0WGY	BV2018PCBW5031	151	2	5	122
60	636950	48	8497718	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-14Y-0WGY	BV2018PCBW5028	152	2	5	120
61	636951	57	8497725	BAJ #1//KENYA SUNBIRD/2*KACHU	CMSS14B00020S-09M-09M-09M-12Y-0WGY	BV2018PCBW5035	153	2	5	125
62	636932	66	8497695	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-11Y-0WGY	BV2018PCBW5005	154	2	5	103
63	636935	28	8497702	BORL14//KACHU/KIRITATI	CMSS14B00004S-09M-09M-09M-1Y-0WGY	BV2018PCBW5012	155	2	5	109
64	636941	76	8497707	BORL14/3/SWSR22T.B./2*BLOUK #1//WBLL1*2/KURUKU	CMSS14B00010S-09M-09M-09M-14Y-0WGY	BV2018PCBW5017	156	2	6	111
65	636956	44	8497737	NELOKI/4/KACHU*2/3/ND643//2*PRL/2*PASTOR	CMSS14B00025S-09M-09M-09M-19Y-0WGY	BV2018PCBW5047	157	2	6	130
66	636952	72	8497701	VILLA JUAREZ F2009//KACHU/KIRITATI	CMSS14B00001S-09M-09M-09M-35Y-0WGY	BV2018PCBW5011	158	2	6	108
67	636951	56	8497724	BAJ #1//KENYA SUNBIRD/2*KACHU	CMSS14B00020S-09M-09M-09M-6Y-0WGY	BV2018PCBW5034	159	2	6	124
68	636950	45	8497715	BAJ #1//KACHU/KIRITATI	CMSS14B00019S-09M-09M-09M-7Y-0WGY	BV2018PCBW5025	160	2	6	118

Mapping of IWIS Data to cimmyt database tables

IWIS Data Item	cimmyt database table	cimmyt database column
TID	plots	tid
OCC	plots	occ
Trial Name	plots	trial
Trial Abbr	Not mapped	Not mapped
Cycle	plots	cycle
Program	Not mapped	Not mapped
CID	germplasm	cid
SID	germplasm	sid
GID	plots, germplasm	gid
Cross Name	germplasm	cross_name
Selection History	germplasm	selection_history
Plot	plot	plot_no
Origin	plot	seed_source
Rep	plot	rep
SubBlock	plot	subblock
Entry	plot	entry

IWIS Variant for Segregating Populations (F6-F7_

The IWIS file format for segregating populations is slightly different

Filename structure:

T06_<TID>_001_EPC.xls Example: T06_046811_001_EPC.xls

File structure:

Row 1 Col A: 'TID' Row 1 Col 2:

Row 2 Col A: 'OCC' Row 2 Col 2:

Row 3 Col A: 'Trial Name' Row 3 Col 2:

Row 4 Col A: 'Trial Abbr' Row 4 Col 2:

Row 5 Col A: 'Cycle' Row 5 Col 2:

Row 6 Col A: 'Program' Row 6 Col 2;

Row 7 Blank

Row 8 Column Headings for plot and germplasm data columns:

Column A: 'Entry'

Column B: 'CID'

Column C: 'SID'

Column D: 'GID'

Column E: 'Cross Name'

Column G: 'Plot'

Column H: 'Rep'

(Columns beyond column G can be ignored.)

Row 9 to EOF: Data values for plot and germplasm tables.

Example File:

	A	B	C	D	E	F	G	H	I	J	K	L
1	TID :	46811			Condition - B5I							
2	OCC :	1										
3	Trial Nam	F6-F7BW										
4	Trial Abbr	F6-F7BW										
5	Cycle :	Y17-18										
6	Program	BW										
7												
8	Entry	CID	SID	GID	Cross Name	Plot	Rep					
9	1	636932	23	8249786	VILLA JUAREZ F2009/KACHU/KIRITATI		1	1				
10	2	636932	25	8249788	VILLA JUAREZ F2009/KACHU/KIRITATI		2	1				
11	3	636932	29	8249792	VILLA JUAREZ F2009/KACHU/KIRITATI		3	1				
12	4	636932	31	8249794	VILLA JUAREZ F2009/KACHU/KIRITATI		4	1				
13	5	636932	32	8249795	VILLA JUAREZ F2009/KACHU/KIRITATI		5	1				
14	6	636932	34	8249797	VILLA JUAREZ F2009/KACHU/KIRITATI		6	1				
15	7	636932	36	8249799	VILLA JUAREZ F2009/KACHU/KIRITATI		7	1				
16	8	636932	40	8249803	VILLA JUAREZ F2009/KACHU/KIRITATI		8	1				
17	9	636932	41	8249804	VILLA JUAREZ F2009/KACHU/KIRITATI		9	1				
18	10	636932	42	8249805	VILLA JUAREZ F2009/KACHU/KIRITATI		10	1				
19	11	636932	44	8249807	VILLA JUAREZ F2009/KACHU/KIRITATI		11	1				
20	12	636932	46	8249809	VILLA JUAREZ F2009/KACHU/KIRITATI		12	1				
21	13	636932	49	8249812	VILLA JUAREZ F2009/KACHU/KIRITATI		13	1				
22	14	636932	51	8249814	VILLA JUAREZ F2009/KACHU/KIRITATI		14	1				
23	15	636932	54	8249817	VILLA JUAREZ F2009/KACHU/KIRITATI		15	1				
24	16	636932	55	8249818	VILLA JUAREZ F2009/KACHU/KIRITATI		16	1				
25	17	636932	56	8249819	VILLA JUAREZ F2009/KACHU/KIRITATI		17	1				
26	18	636932	59	8249822	VILLA JUAREZ F2009/KACHU/KIRITATI		18	1				
27	19	636935	18	8249824	BORL14/KACHU/KIRITATI		19	1				
28	20	636935	19	8249825	BORL14/KACHU/KIRITATI		20	1				
29	21	636935	20	8249826	BORL14/KACHU/KIRITATI		21	1				
30	22	636935	24	8249830	BORL14/KACHU/KIRITATI		22	1				
31	23	636935	25	8249831	BORL14/KACHU/KIRITATI		23	1				
32	24	636941	41	8249836	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		24	1				
33	25	636941	42	8249837	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		25	1				
34	26	636941	43	8249838	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		26	1				
35	27	636941	45	8249840	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		27	1				
36	28	636941	46	8249841	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		28	1				
37	29	636941	48	8249843	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		29	1				
38	30	636941	52	8249847	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		30	1				
39	31	636941	53	8249848	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		31	1				
40	32	636941	54	8249849	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		32	1				
41	33	636941	56	8249851	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		33	1				
42	34	636941	57	8249852	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		34	1				
43	35	636941	58	8249853	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		35	1				
44	36	636941	62	8249857	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		36	1				
45	37	636941	67	8249862	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		37	1				
46	38	636941	73	8249868	BORL14/3/SWSR22T.B./2*BLOUK #1/WBLL1*		38	1				

Mapping of IWIS Data for Segregating Populations to cimmyt Database Tables

IWIS Data Item	cimmyt database table	cimmyt database column
TID	plots	tid
OCC	plots	occ
Trial Name	plots	trial
Trial Abbr	Not mapped	Not mapped
Cycle	plots	cycle
Program	Not mapped	Not mapped
Entry	plot	entry
CID	germplasm	cid
SID	germplasm	sid
GID	plots, germplasm	gid
Cross Name	germplasm	cross_name
Plot	plot	plot_no
Rep	plot	rep

FieldMap

FieldMap input files provide a FieldMap with just the numeric plot numbers provided for each plot in an Excel spreadsheet. The FieldMap annotation program reads in the FieldMap spreadsheet and converts the numeric plots to a standard KSU-cimmyt plot_id e.g. 19-OBR-YTBW-B5I-960.

N.B. All IWIS files should be processed before processing fieldmaps since the FieldMap annotation program will update the row and column numbers in the cimmyt database plot table.

The key requirements for the FieldMap spreadsheets is that every spreadsheet should have the same format.

Specific requirements are:

1. Row 1 is a blank row.
2. Column B is a blank column.
3. Column A contains the row numbers for the plot.
4. Row 2 contains the column numbers for the plot.
5. The last column contains the trial identifiers for each row.

Specific improvements that could be made are:

1. The trial values in the trial column should be exactly the same as the trial values populated from the IWIS files. Currently this is not the case. Example: The IWIS trial number is YTBW_09, whereas the FieldMap trial number is YTBW 09 (i.e. with a space instead of an underscore.) If the trial values were exactly the same, this would potentially allow the trial number to be used to query the plots table in the cimmyt database to retrieve the correct trial values in the case where a FieldMap contains multiple trials in the same spreadsheet.
2. Filenames should not have any spaces in them. Underscores should be used instead of spaces.

FieldMap Variants

In the past FieldMaps for F5 and F6-F7 have a different layout than the FieldMaps described in previous sections.

In the future, these FieldMaps should follow the same layout as the standard FieldMap files.

Specific requirements are:

1. Row 1 is a blank row.
2. Column B is a blank column.
3. Column A contains the row numbers for the plot.
4. Row 2 contains the column numbers for the plot.
5. The last column contains the trial identifiers for each row.

(The main issue in the past is that the first row in each spreadsheet should be blank.)