

Extracted and edited from http://cropwiki.irri.org/icis/index.php/Germplasm_Development_and_Maintenance_Methods

METHN	MTYPE	MGRP	MCODE	MNAME	MDESC	MREF	MPRGN	MFPRG	MATTR	GENEQ	MUID	LMID	MDATE
Most common methods for crop registries													
62	MAN	G	ISE	IMPORT	Import seed, clones or tissue culture of a cultivar, line, population or accession. This is normal for most accessions, since they are obtained either from a donor in a breeding programme or another genebank, or from a collector. Probably the only exceptions will be (a) accessions with no passport data at all, not even country of origin, and (b) accessions created from other accessions within the same genebank, e.g. by selecting particular variants out of a heterogeneous accession. In these cases, GDATE=date of import, GLOCN=importing genebank, GPID2=the previous sample (the donor's accession, the breeder's line, or the collector's sample).		-1	0	0	0	1	0	19980610
-1	MAN	G	ISE	IMPORT deduced	Deduced from associated data that the GID was imported to GLCON from the GLOCN of its GPID2, without specific data on the import but with high certainty. Further details should be in attributes		-1	0	-1	0	1	0	20080000
-2	MAN	G	ISE	IMPORT deduced probable	Deduced from associated data that the GID was probably imported to GLCON from the GLOCN of its GPID2, without specific data on the import and with some uncertainty. Further details should be in attributes		-1	0	-1	0	1	0	20080000
-3	MAN	G	ISE	Unknown maintenance structure	Deduced from associated data that the GID originated from its GPID2 by maintenance methods, but with unknown intermediate steps and unrelationship with sister GIDs from the same GPID2. Further details should be in attributes. In the case of presumed duplicate accessions with unknown history, the GID of each accession will normally be linked directly to its GPID1 (i.e. with GPID1=GPID2)		-1	0	0	0	1	0	20080000

69	MAN	G	CSE	COLLECTED	Collected seed of a cultivar, population or accession. In these cases, GDATE=date of collection, GLOCN=collecting location. This is a generic method to be used for the GPID1 of probably all accessions derived from materials that were originally collected. It replaces methods 251-259, which are discouraged because (a) often we don't know which specific method was used (b) there are MCPD descriptors as attributes specifying those differences (c) in their original MDESC, they do not allow distinction between GID.GLOCN=location of holding genebank and GPID1.GLOCN=location of collecting site (although their MDESC below has been revised to enable such distinction).	12	-1	0	0	0	112	0	0
205	DER	S	DSP	SINGLE PLANT SELECTION SF	Germplasm created by selecting a single plant, inflorescence, fruit or seed from a variable accession. Typically applies only within a genebank.		-1	0	221	0	1	11	19980610
206	DER	S	DSB	SELECTED BULK SF	Germplasm created by selecting a set of plants with a common phenotype from a variable accession. Typically applies only within a genebank.		-1	0	208	0	1	12	19980610
-4	DER	S	DSB	SELECTION SF	New method needed? Germplasm created by selecting a phenotypically uniform subset from a variable accession, but we don't know whether the selection is from a single plant or a set of plants. Typically applies only within a genebank.		-1	0		0	1	12	20080000
31	DER	S	UDM	UNKNOWN DERIVATIVE METHOD SF	Unknown derivative method in self fertilising species: likely to be used (a) for accessions with no passport data at all and (b) for the GPID1s of accessions where the GPID1 has unknown origin		-1	0	0	0	1	1	19980610
326	MAN	S	VCR	CULTIVAR RELEASE	GID representing the official release of a cultivar. Any accession that is a sample of an officially released cultivar should have in its history a GID representing the cultivar release - with GDATE and GLOCN equal to the date and place of release, and with a name of type RELNM representing the official released variety name (note only this one GID should use name type RELNM - all maintenance progeny GIDs of the variety should have the same variety name as type CVNAM)		-1	0	104	0	1	0	19980610
Methods for storing historical pedigrees with incomplete information. These may be used for the GPID1 of a bred accession, representing the cross from which it is derived													
1	GEN	S	UGM	UNKNOWN GENERATIVE METHOD SF	Unknown generative method for storing historic pedigrees for self fertilizing species.		0	0	0	0	1	2	19980610
2	GEN	O	PGM	UNKNOWN GENERATIVE METHOD CF	Unknown generative method for storing historic pedigrees for cross fertilising species.		0	0	0	0	1	0	19980610
4	GEN	S	BDU	F1 BACKCROSS, CYTOPLASM UNKNOWN SF	Cross of F1 to recurrent parent when the direction of the cross is unknown for storing historic pedigrees for self fertilizing species.		2	0	0	0	1	5	19980610
5	GEN	O	PDU	F1 BACKCROSS, CYTOPLASM UNKNOWN CF	Cross of F1 to recurrent parent when the direction of the cross is unknown for storing historic pedigrees for cross fertilising species.		2	0	0	0	1	0	19980610

6	GEN	S	BRU	F2 BACKCROSS, CYTOPLASM UNKNOWN SF	Cross of F2 to recurrent parent when the direction of the cross is unknown for storing historic pedigrees for self fertilizing species.		2	0	0	0	1	28	19980610
7	GEN	O	PRU	F2 BACKCROSS, CYTOPLASM UNKNOWN CF	Cross of F2 to recurrent parent when the direction of the cross is unknown for storing historic pedigrees for cross fertilising species.		2	0	0	0	1	0	19980610
8	GEN	G	CCU	CROSS, CYTOPLASM UNKNOWN	Cross between two plants, unknown which is female		2	0	0	0	1	0	19980610
9	GEN	G	PCU	POPULATION CROSS, CYTOPLASM UNKNOWN	Cross between two populations, unknown which is female		2	0	0	0	1	0	19980610
Methods for storing pedigrees of inbreeding crops. These may be used for the GPID1 of a bred accession, representing the cross from which it is derived													
101	GEN	S	C2W	SINGLE CROSS	Cross between two single plants.		2	1	0	0	1	3	19980610
102	GEN	S	C3W	THREE-WAY CROSS	Cross between two plants, one an inbred line and one a single cross (usually an F ₁) and thus segregating for gametes. I		2	1	0	0	1	4	19980610
103	GEN	S	CDB	DOUBLE CROSS	Cross between two single crosses (usually two F ₁ s) and hence both segregating for gametes.		2	1	0	0	1	8	19980610
104	GEN	S	CFT	FEMALE COMPLEX TOP CROSS	Cross between a female inbred line and a three-way or more complex cross among inbred lines, thus the male is segregating for genotypes as well as gametes.		2	1	0	0	1	0	19980610
105	GEN	S	CMT	MALE COMPLEX TOP CROSS	Cross between a male inbred line and a three-way or more complex cross among inbred lines, thus the female is segregating for genotypes as well as gametes.		2	1	0	0	1	0	19980610
106	GEN	S	CCX	COMPLEX CROSS	Cross between two three-way or more complex crosses among pure lines, thus both sides are segregating for both gametes and genotypes.		2	1	0	0	1	9	19980610
107	GEN	S	BC	BACKCROSS	Backcross to recover a specific gene. The coding in the genealogical table records which parent was used as the female in each cycle.		2	1	0	0	1	6	19980610
110	GEN	S	CSP	SELECTED POLLEN CROSS SF	A bulk of pollen from a selected set of males used to pollinate a female inbred line.		n	1	0	0	1	22	19980610
111	GEN	S	CRP	RANDOM POLLEN CROSS SF	A random bulk of pollen from some population used to pollinate a female pure line. Male is then a population and will be recorded as a single entity.		2	1	0	0	1	0	19980610
112	GEN	S	CGO	OPEN POLLINATED SF	Open pollination in a self fertilised species		n	0	212 222	0	1	0	19980610
151	GEN	S	MUN	NATURAL VARIANT SF	A recognised naturally occurring variant in a self fertilising population.		1	1	0	0	1	10	19980610
152	GEN	S	MIP	INDUCED MUTATION POPULATION SF	A population derived from inducing mutation in a inbred line.		1	1	210	0	1	0	19980610

153	GEN	S	SCL	SOMOCLONE SF	Variation induced through tissue culture of a inbred line.		1	1	0	0	1	0	19980610
154	GEN	S	ALP	ALLO-POLYPLOID SF	Polyploid formed by doubling the chromosomes of a cross between two or more species. Wheat is an allopolyploid as it contains genomes from three different species.		1	1	0	0	1	0	19980610
155	GEN	S	AUP	AUTO-POLYPLOID SF	Polyploid formed by doubling the chromosome number of a species. Lucerne (alfalfa) is an autopolyploid with 4 sets of the same genome.		1	1	0	0	1	0	19980610
156	GEN	S	HAP	HAPLOID SF	Individual with chromosome content of reduced gamete. Often formed by female progenitors crossed with a haploid inducer.		1	1	0	0	1	0	19980610
157	GEN	S	TRN	TRANSGENIC NUCLEUS SF	Individual derived from genetic transformation of the nucleus in a self fertilising species.		1	1	0	0	1	0	19980610
158	GEN	S	TRC	TRANSGENIC CYTOPLASM SF	Individual derived from genetic transformation of a cytoplasm inclusion (eg chloroplast) in a self fertilising species.		1	1	0	0	1	0	19980610
Derivative Methods for Inbreeding Crops: unlikely to be used much, if at all, in crop registries													
201	DER	S	MIL	INDUCED MUTATION LINE	A recognised mutation selected from an induced mutation in a line of a self fertilised species.		-1	0	0	0	1	0	19980610
202	DER	S	DDH	DOUBLE HAPLOID LINE	Individual produced by doubling haploid individual usually by anther culture in a self fertilised crop.		-1	0	0	0	1	14	19980610
203	DER	S	DPR	PURIFICATION	Selection of one or a few plants from an inbred line or pure line cultivar.		-1	0	0	0	1	18	19980610
204	DER	S	DRU	ROGUING SF	Eliminating off types from a inbred line or pure line cultivar.		-1	0	0	0	1	0	19980610
207	DER	S	DRB	RANDOM BULK SF	Derivation through bulking seed from a random selection of single plants from a self fertilising population.		-1	0	0	0	1	21	19980610
208	DER	S	DSD	SINGLE SEED DESCENT SF	Derived through the production of a single individual without selection from each individual in a segregating population.		-1	0	0	0	1	13	19980610
209	DER	S	DRS	CMS RESTORER SELECTION	Restorer Lines selected at the end of a program to back cross a gene which restores male fertility to lines carrying a Male Sterile Cytoplasm (CMS) to the male of a commercial hybrid.		-1	0	0	0	1	31	19980610
210	DER	S	DMS	CMS MAINTAIN ER SELECTION	Maintainer line selected at the end of a program to create the male fertile equivalent of the CMS female parent of a hybrid		-1	0	0	0	1	0	19991201
251	DER	S	ALP	LANDRACE POPULATION SF	A collected population sample of a landrace of a self fertilised species. This population will consist of a heterogenous mixture of homogenous genotypes. This and the following eight methods should be reserved for the original collected sample of these types of population before being accessed into a collection		-1	0	0	0	1	15	19980610
252	DER	S	ALL	LANDRACE LINE SF	Seed from a single plant collected collected from a landrace population		-1	0	0	0	1	0	19980610

253	DER	S	ALC	LANDRACE CULTIVAR SF	A collected sample of a long-term landrace cultivar, bred and maintained by farmers not by modern breeding methods. Typically less heterogeneous than a traditional landrace		-1	0	0	0	1	0	19980610
254	DER	S	ACP	COLLECTION POPULATION SF	A sample collected from a population of a cultivated self fertilising species not from farmers fields.		-1	0	0	0	1	0	19980610
255	DER	S	ACL	COLLECTION LINE SF	A single plant collected from a population of a cultivated self fertilising species not from farmers fields.		-1	0	0	0	1	17	19980610
256	DER	S	AWP	COLLECTION WILD SPP POPULATION SF	A sample collected from a population of a self fertilising wild species		-1	0	0	0	1	16	19980610
257	DER	S	AWL	COLLECTION WILD SPP LINE SF	A single plant collected from a population of a self fertilising wild species		-1	0	0	0	1	0	19980610
258	DER	S	ADP	COLLECTION WEEDY SPP POPULATION SF	Acquisition only. An accession of a self fertilising species which is a weed (because of the result of a hybrid between the cultivated and a wild species of the crop).		-1	0	0	0	1	0	19980610
259	DER	S	ADL	COLLECTION WEEDY SPP LINE SF	Acquisition only. When the accession derives from a single plant in a collection of weedy species.		-1	0	0	0	1	0	19980610
Management Methods for Inbreeding Crops: unlikely to be used much, if at all, in crop registries													
301	MAN	S	NSP	SEED INCREASE PLANT SF	Seed increase from a single plant in a self fertilised species.		-1	0	0	0	1	0	19980610
302	MAN	S	NMX	SEED INCREASE MIXTURE SF	Seed increase from a number of selected plants in a self fertilised species.		-1	0	0	0	1	0	19980610
303	MAN	S	NBK	SEED INCREASE BULK SF	Seed increase from an unselected bulk in a self fertilising species.		-1	0	0	0	1	0	19980610
320	MAN	S	VPL	PURE LINE FORMATION	Forming a pure line CV in a self fertilising species.								
321	MAN	S	VHY	HYBRID FORMATION SF	Forming a hybrid CV in a self fertilising crop.		-1	0	0	0	1	25	19980610
322	MAN	S	VML	MULTI-LINE FORMATION SF	Forming a multi-line CV in a self fertilising crop		-1	0	0	0	1	0	19980610
323	MAN	S	VBS	BREEDERS SEED SF	Producing Breeder's Seed. Pure seed produced by breeder (usually some kept by breeder) in a self fertilising crop.		-1	0	0	0	1	0	19980610
324	MAN	S	VFS	FOUNDATION SEED SF	Producing Foundation Seed. Pure seed derived from Breeders seed (usually kept by seed producing organisation) in a self fertilising crop.		-1	0	0	0	1	0	19980610
325	MAN	S	VCS	CERTIFIED SEED	Producing Certified Seed. Pure seed produced under supervision by Government Protocols.		-1	0	0	0	1	0	19980610