Naming of Genetic Stocks involving insertion/deletion events

In accordance with established nomenclature systems in other organisms, a *delta* ("Δ") will be used to indicate a deletion and a *double colon (*"::") for an insertion. For example, where the insertion/deletion is the result of an experiment involving chemical mutagenesis or radiation, a deletion that disrupts the *Acp*1-1 gene in cultivar Nipponbare (wild type) would be represented as: <Nipponbare:*Acp*1-1>. A double mutant with deletion in both the *Acp*1-1 gene and the *Adh*1 gene would be represented as: <Nipponbare:. Δ*Acp*1-1; Δ*Adh*1>. In the case of a set of lines in which insertions are caused by tissue-culture activation of the native retrotransposon, *Tos*17, in cultivar Nipponbare (wild type), a line in which the *Acp*1-1 gene is disrupted will be represented as <Nipponbare:*Acp*1-1::*Tos*17>. [Comments from FUNCTIONAL GENOMICS groups would be appreciated here.] Where insertion/deletion stocks are generated via transgenesis, the prefix 'TG' will be used before the name of the wild type cultivar, followed by the conventions described above. Transgenic (TG) lines include both integrative (heritable) and non-integrative (transient) transformation events. Constructs involved in transformation may be designed for co-suppression, promoter traps, enhancer traps, gene traps, activation tags, transposon tags, T-DNA insertions, etc. For example, in a set of transposon tagged lines containing Ac/Ds tags in the cultivar Nipponbare, a line where the *Acp*1-1 gene is disrupted would be represented as: <TG:Nipponbare:*Acp*1-1::Ac/Ds> . A transgenic line designed to produce the *Bt* crystal protein, introduced using a construct consisting of the *nos* promoter, the *gus*A reporter gene, a hygromycin selectable marker, the *Bt* gene and the *nos* terminator, the line would be represented as: <TG:Nipponbare::*nos*P:*gus*A:hygro:*Adh*1:*nos*T>. A line that was transformed for transient expression of the *Adh*1 gene using the plasmid pPBI101 would be indicated as: <TG:Nipponbare::*Adh*1(pPBI101)>.

In cases where the insertion or deletion can be mapped to either an assembled sequence from a chromosome or an ordered BAC/PAC clone, in place of a gene name, the user can assign either an identified gene name (transcribed element) or and already assigned systematic locus ID for the ORF. In cases where the insertion does not fall in the genic region (transcribed region) the user should use the chromosome number/sequenced clone name followed by the base pair position of the point of insertion/deletion.

Naming of cytoplasm:

The cytoplasm type is represented by an abbreviated name of the cytoplasmic group (as assigned by the CGSNL) in which the cytoplasmic trait was identified and the name will be enclosed in square brackets. In cases where the cytoplasm is conferring cytoplasmic male sterility, the abbreviation "cms" followed by a dash ("-") will be used as a prefix to the cytoplasm name. For example: [cms-WA] (from wild abortive cytoplasm).

Structural change of chromosomes.

Chromosomal changes are denoted by a symbol showing the type of aberration plus the chromosome number(s) involved. The symbols used are: **Dp** for duplication, **In** for inversion, **Tn** for translocation, **Tp** for transposition. To distinguish between similar aberrations involving the same chromosome(s), lower-case letters are used following the chromosome numbers (Example: In(1)a, In(1)b, Tn(1-2)a Tn(1-2)b).

Aneuploids.

Monosomics and primary trisomics are designated according to the additional chromosome (Example: Mono1, Mono2, Triplo1, Triplo2).

Seed stocks:

Authors publishing reports describing genes, genomes and mutants in international journals are required to make sequences, clones and genetic materials available to the public. The preference is given to IRIS, where independent of availability of seed stock, the authors is suggested to deposit the germplasm entry in the IRIS, in order to get the IRGC number. The same can be submitted to the National germplasm databases. Thus assuring consistency in the curation of seed stocks. This process does not require the physical deposition of the seeds (A major concern for the international researchers) to IRIS germplasm repository or INGER.

Contact information for Rice Germplasm Collections throughout the world is listed below:

- International Rice Germplasm Center in the Philippines, [http://www.irri.org/GRC/grchome/home.htm]
- International rice information system [http://iris.irri.org/]
- List of stock centers in Japan [http://www.shigen.nig.ac.jp/rice/oryzabase/strains/queryForm.jsp]
- National Plant Germplasm System (NPGS) in the US [http://www.ars-grin.gov/npgs/searchgrin.html]
- Chinese Crop Germplasm Information System [http://icgr.caas.net.cn/cgris_english.html],
- Directorate of Rice Research, India [http://www.drrindia.org/]
- National Plant Genetic Resources Center in Taiwan [http://192.192.196.1/npgrc1/index_e.html]