

Genetic Stocks – *Oryza* (GSOR) Collection
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2005 Activities Report
December 31, 2005

The GSOR received a total of 35 requests for seed samples as of December 31, 2005 – 8 genetic stocks and 27 Nipponbare requests. Two genetic stocks requests were from foreign countries, India and Sri Lanka. Neither foreign request has been completed: Sri Lanka has not provided the needed import permit; and the India seed shipment is waiting completion of a nematode inspection to be completed at the Southwest Research and Extension Center in Hope, AR. One half (four) of the genetic stocks requests were for samples of the K/Z mapping population.

In January, 2005, the GSOR became a distribution site for Nipponbare, the preferred material for use in rice molecular studies. The GSOR material descends, via Dr. Susan McCouch, Cornell University, from the selection Dr. T. Sasaki of Japan provided to the International Rice Gene Sequencing Project. During 2005, the GSOR responded to 27 Nipponbare requests. All requests were from the United States and samples were distributed in 100g lots. During the 2005 growing season there was a seed increase of Nipponbare to replenish the GSOR inventory.

The 2005 growing season provided new seed for each of the 20 GSOR entries as needed. The K/Z mapping population inventory was grown again in 2004 and has been the source of 2005 seed distributions.

The GSOR Laboratory completed data collection on four genetic stocks releases during the 2005 growing season. These releases designated apoptosis, chives, extreme dwarf, and gold leaf are described in an ARS Release document submitted for review in December. Upon approval, the material will be available for distribution as GSOR entries 21, 22, 23, and 24.

A second mapping population, donated by Dr. Q.R. Chu, of the Rice Research Station, Louisiana State University, was entered in December. This population includes 325 doubled haploid lines from the Cocodrie/MCR01-0277 cross and was created with the objective to further understand the molecular basis of sheath blight resistance. These lines are designated as GSOR entries 200001 to 200325.

Data are being analyzed in preparation for the 2006 release of a giant embryo mutant. Also, a set of 191 mutants, donated by Japan's Dr. Toshiro Kinoshita, via Dr. Susan McCouch, Cornell University, has been approved for entry to the GSOR collection. This material arrived with complete gene characterization and chromosomal identification. Seed increase is necessary before distribution can occur.

The GSOR website continues as the main source of information transfer for the Collection. Each entry of the collection is described on the Current Entries page of the website.

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