

Category	: International Rice Research Conference
Select Theme	: Genetic improvement
Endorsement email	:
Keyword 1	: Hybrid rice
Keyword 2	: Breeding Strategy
Keyword 3	:
Title of Entry	: Hybrid rice for Latin America (HIAAL) consortium, progress and advances
Presenting author	: Maria Fernanda Alvarez
Presenting author email	: m.f.alvarez@cgiar.org
Co author 1	: Silvio James Carbalí
Co author 2	: Constanza Quintero
Affiliation presenting author	: CIAT
Affiliation 1	: CIAT
Affiliation 2	: CIAT
Select only one type of presentation	: 3-5 minute flash talk
Abstract	: Hybrid Rice for Latin America (HIAAL) is a consortium of 11 countries from Latin America and the Caribbean (LAC) and CIAT that develops hybrids for both tropic and temperate LAC regions. Since 2011 HIAAL has been delivering nurseries to their members each year, with the aim of identifying high-yielding and good-grain quality hybrids. Over the last two years HIAAL developed studies to evidence the advance of the program and to help its members to identify the best genotypes looking forward to releasing them as commercial hybrids. The objectives of this research were: 1) Identify the best hybrids in a multi environmental trial (MET) with high-performing hybrids selected by HIAAL members from the 2011 and 2012 nurseries and 2) tracking the advance of the program based on the analysis of the reported yield in some countries from the 2012 to 2015 HIAAL nurseries. The MET were tested in 3 to 5 locations per country in 2015 and 2016. The highest-yielding hybrids' parental lines were linked to a diversity and population structure analysis. We found out in the MET superior and stable hybrids for Argentina, Brazil, Uruguay, Colombia, Ecuador, and Peru. From the yield analysis of the 2012-2015 nurseries, we found out that average yield of the 2013 nursery was higher than the 2012, 2014 and 2015 nurseries, but in the 2015 nursery some hybrids showed the highest yield reported thus far in the HIAAL program. Another finding was that one country reported up to 60% heterosis as compared to the best check variety. Finally linking high-yielding hybrids' parental lines with diversity and structure showed a small cluster of R lines for the LAC tropic zone and another small cluster for the temperate zone. This research evidences that the HIAAL consortium has succeeded in obtaining experimental high-yielding hybrids with wide adaptation for hybrid rice production in LAC.

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