



OFFICE OF THE HYBRID RICE DEVELOPMENT CONSORTIUM

1 **1st HRDC-Advisory Committee Teleconference**
2 **DG Conference Room**
3 **FF Hill, IRRI, Philippines**
4 **October 30, 2017**

5 **Attendance:**

6 Dr. Jacqueline Hughes, IRRI, Chair
7 Dr. Jauhar Ali, IRRI, Head of HRDC
8 Dr. Ju Luo (representative of Dr. Pesiong Hu of CNRRI)
9 Dr. Eduardo Jimmy Quilang, PhilRice
10 Dr. R. Saraswathi, TNAU
11 Dr. M.A. Salam, Advanced Chemical Industries Limited
12 Dr. Yog Raj, Bayer BioScience Pvt Ltd
13 Dr. V.N. Kulkarni, JK Agri-Genetics Ltd.
14 Dr Remy Bitoun, IRRI - Head of PPE

15 **Highlights**

16 **Summary of recent activities and achievements**

- 17 1. Increased HRDC membership (50 green members + 27 gold members + 3 platinum
18 members) in 2017
19 2. 11 hybrids were released in the Philippines under HRDC (2009-2016) and 2 new hybrids
20 were nominated for NCT trial in Philippines
21 3. Observed gradual increase in the heterosis level of the hybrids developed by HRDC
22 members based from MRYT data from the last five years
23 4. Under revitalized HRDC program, the following germplasms were shared with HRDC
24 members: 12 A + 15R, F2/F3 population, and starter kit (for new members)
25 • A/B pairs + 10 new R lines will be shared with those who submitted their report
26 regarding the performance of A lines
27 5. Field demonstration of IRRI hybrids and Chinese hybrids was conducted at IRRI-South Asia
28 Hub in Hyderabad and HRDC members were invited to see the performance of those
29 hybrids and checks whether it may be useful for them
30 6. Top 4 hybrids are now available for commercialization (Mestiso 61, 68, 71 and 77)
31 7. Commercial license of M30 was taken by one private HRDC member
32 8. Market needs for hybrid rice in key countries in Asia were highlighted

33 **Proposed next steps**

- 34 1. Parental line development that focus on breeding for better parents that meets the market
35 requirements for grain quality, disease resistance, and outcrossing ability;
36 • Materials that will be tested in different locations/countries should meet the
37 requirements of target markets



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- 38 • Fine tuning of HRDC guidelines for sharing parental lines, especially elite parental
39 lines and hybrids
- 40 2. Two line hybrid rice breeding;
- 41 3. HRDC 1000 F1 multi-location evaluation experiment (IRRI Bred) -a statistical model will be
42 used to predict the performance of different parental lines in 10 locations based from the
43 performance of their F1s and this information would help in breeding superior parental lines
44 that can be shared with all HRDC members)
- 45 • A suggestion was brought up that parental line improvement could cater wider Asian
46 countries should be done instead of specifically targeting hybrids and further
47 suggested that it should be considered keeping the resources needed for 1000 F1
48 multi-location experiment.
- 49 • The 1000 F1s will be developed by IRRI and will be tested in 10 locations but not all
50 1000 will be tested in 10 locations, there will be at least 250-300 hybrids per location
51 in augmented design with overlaps across 10 locations and a set of same checks in
52 all locations together with the best local checks in the area.
- 53 4. Develop heterotic pools to maximize heterosis using genomic tools
- 54 5. Hybrid rice training courses will be done in the target regions to minimize the training cost
55 and increase the number of participants that will be trained
- 56 • Proposed training courses: 1) Hybrid rice seed production course (taking the course
57 to target country, can be also done in Hyderabad with the help of NARES partners);
58 2) Advance hybrid rice breeding courses (target country/IRRI HQ); 3) Hybrid rice
59 technology for executives/policy makers (at IRRI HQ)
- 60 • Funding for training should be handled by individual companies/institutions
- 61 • Hosting of trainings by any HRDC members is encouraged, but there should be clear
62 guidelines for this.
- 63 • A survey to all HRDC members about the kind of training that they want should be
64 conducted
- 65 6. Third party hybrids will be introduced to all HRDC members (CAAS, AfricaRice, CIAT and
66 NARES)-facilitation can be done by IRRI-PPE
- 67 7. Non-HRDC elite breeding materials like 15 MAGIC indica materials and 15 IRRI bred
68 multiple stress tolerant indica lines with restorer genes can be made available to all HRDC
69 members subject to special licensing from IRRI-PPE
- 70 8. Formation of HRDC Technical Committee that will be responsible to set technical direction
71 to HRDC programs

72 ***Proposal to update the new HRDC action/communication plan and deliverables, for next***
73 ***3 years***

- 74 1. All information regarding HRDC will be posted on the HRDC website together with the news
75 on hybrid rice, MRYT results, HRDC activities and guidelines. A newsletter can also be put
76 up for HRDC.



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- 77 2. Improve the communication plan: bring new brochures, web page improvements, more
78 engagements, regular updates (progress reporting annual report, midterm report from
79 HRDC team)
- 80 • HRDC has a communication person who will be responsible for all HRDC
81 communications with all concerned stakeholders including committee members.
 - 82 • Updating will be done twice a year (midterm report and annual report)
- 83 3. Advisory committee members agreed that they prefer to receive information regarding
84 HRDC through emails.
- 85 4. HRDC advisory committee members' profile will be posted on the website as suggested by
86 one HRDC AC member

87 **Update on upcoming International Hybrid Rice Symposium (IHRS)**

- 88 1. February 27, 28 and March 1, 2018 at Hotel Alana, Yogyakarta, Indonesia
- 89 • The hybrid rice field demonstration in Bali will be showcased at the event through
90 short documentary

91 **NEW SET OF GUIDELINES AGREED UPON BY THE HRDC ADVISORY COMMITTEE**

- 92 1. Technical Advisory Committee Members (will give technical advice to the IRRI hybrid rice
93 breeder in developing and carrying out HRDC funded projects that could maximize impact
94 and value by delivering better products to all HRDC members)
- 95 • Dr Rex Bernardo- Professor and Endowed Chair in Corn Breeding and Genetics,
96 Department of Agronomy and Plant Genetics, University of Minnesota, Saint Paul
 - 97 • Dr Harish Gandhi- Head, Trait Development, APAC, Syngenta
 - 98 • Prof Ed Buckler- Adjunct Professor, Plant breeding and Genetics Section, School of
99 Integrative Plant Science, College of Agriculture and Life Sciences, Cornell University
 - 100 • Prof Zhikang Li- Chief Scientist, Institute of Crop Sciences, CAAS
 - 101 • Prof. Ed Ramos-Retired Professor, Department Of Agronomy, University Of
102 Philippines Los Banos
- 103 2. New HRDC Members Category
- 104 • Platinum-Green Category
 - 105 i. Will have privileged access to IRRI proprietary non-HRDC Materials like Private
106 Platinum Members
 - 107 ii. Privileged access means - access to non-HRDC materials for an initial period of
108 2 years; after that initial period other members will be granted an access)
 - 109 iii. No membership fees, but commit to phenotype HRDC and IRRI materials at the
110 member's cost and report diligently the results to HRDC
- 111 3. Platform for cross-licensing 3rd party materials and high-value traits
- 112 • HRDC will be the benevolent broker between HRDC members and public/private
113 sector that owns high-value materials/traits/hybrids



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- 114 • 3rd party hybrids/traits/materials will be tested/ validated and showcased by HRDC
115 community
116 • Bilateral agreements between HRDC member and 3rd party will be facilitated by IRRI
117 HRDC
118 • IRRI-HRDC will not dictate the terms and conditions of any such agreement between
119 the 3rd party and HRDC member
120 • The 3rd party will define their own terms and conditions for sharing their high-value
121 materials/traits to be discussed and agreed mutually.
122 4. Licensing of HRDC lines and hybrids
123 • Licensing will still based on the 2017 HRDC Guidelines

124 ***Important Dates To Remember***

- 125 1. 1st face to face meeting- January 2018
126 2. HRDC Annual Workshop for 2017- 2nd day of IHRS, Indonesia
127 3. HRDC Annual Workshop for 2018- 3rd week of October in IRRI-South Asia Hub in
128 Hyderabad

129 Prepared by:

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