2020

PhilRice R&D Highlights

PhilRice Bicol

Contents

STATION

PhilRice Bicol

Branch director: Victoria C. Lapitan

EXECUTIVE SUMMARY

PhilRice Bicol develops and disseminates strategies and technologies that will make rice farming in calamity-vulnerable regions of Bicol and Eastern Visayas more resilient to climate change. The Station helps in increasing rice productivity by developing, adapting, and sharing technologies in the adverse rice environments such as saline, drought, and flood-prone, and upland.

The station implemented two programs, Rice Seed Systems (RSS) and Rice Business Innovations System (RiceBIS), and three station-based projects: Capacity Enhancement and Technology Information Campaign, Reducing Vulnerability through *Palayamanan*® Plus Approach, and the Long-Term Soil Fertility Experiment. Seven studies were also implemented: Philippine Rice Information System (PRISM); Multi-environment and Adaptability Test of Breeding Lines for Abiotic Stresses, Selection and Dissemination of Elite Salt-Tolerant Rice Varieties for AFACI-member Countries; Development of ICM-package in Saline-prone Areas for Increased Productivity in Bicol; National Cooperative Testing for Hybrid; Rice Crop Manager (RCM); and On-farm MP Seeder Technology Verification for Rice in rainfed areas.

Three Rice Competitiveness Enhancement Fund (RCEF)-extension component projects were also carried out implemented: (1) RCEF Farmer Field School on the Production of High-Quality Inbred Rice, Seed Certification, and Farm Mechanization; (2) RCEF-Strategic Communication; and (3) Building and Strengthening of Farmers' Organizations and Seed Growers Associations for more Efficient Seed Production and Dissemination.

Despite the travel restrictions, RiceBIS Phase II and expansion sites were successfully established in Milagros and Mandaon, Masbate respectively. The project has initially trained 180 farmers (104 male and 76 female) on PalaycheckSystem and organizational building and management with an average knowledge gained of 51.7%. Black rice or *tapol*, premium and regular milled rice, and pigmented rice production were identified as potential enterprises of the community.

Rice Seed Systems project implementers had profiled 134 seed growers (108 male and 26 female). Forty-five seed growers were also trained to increase adoption of recommended inbred rice seed production practices.

EXECUTUVE SUMMARY

RSS project implementers also continued the *Binhing Palay,* which demonstrated the yield performance of 13 newly-released varieties for irrigated, rainfed, upland, saline-prone, and multi-stress environments. It also served as source of high-quality inbred seeds of new and adapted varieties through formal or informal seed systems.

The capacity enhancement project reached 6,503 rice stakeholders through 5 PalayAralan sessions, 2 batches of modified Farmer Field School through RCEF, technical dispatch, rice exhibits, PhilRice Text Center (PTC), and PhilRice Facebook page.

The Multi-Environment and Adaptability Test of Breeding Lines for Abiotic Stresses, which evaluated the performance of elite breeding lines in terms of location-specific adaptability, identified 6 genotypes of rice that were promising and adaptable in multi-stress environments in Magarao, Camarines Sur. The identified lines had yield advantage of > 5% over IR29 (9-32% recorded advantage) during the 2020 DS.

Variety 3 (PR43504-14-3-11) with NPK level of 210-30-100 yielded the highest grain in the long-term soil fertility experiment. The Integrated Crop Management (ICM) technology package for saline areas highlights the application of 115-10-15kg of NPK on Salinas 25 (NSIC Rc 470), Salinas 21 (NSIC Rc 462), and Salinas 14 (NSIC 332). This technology package also covers the use of 80kg/ha seeding rate and adoption of drum seeder for direct seeding.

In terms of IEC materials distribution, 18,523 copies were distributed through the One-Stop Information Shop (OSIS) located and maintained in 6 state universities and colleges in Bicol and Eastern Visayas, and in PalayTambayan.

RiceBIS program continuously strengthened the 7 clusters in Albay, trained 23 farmer-members on proper post-harvest handling and 17 farmer-members on rice puto production, and created market linkage to 3 private institutions. An increase in rice yields by 5.06t/ha in 2020 (9.8% from 2017, 16.8% from 2018, and 13.5% from 2019) were noted in the project sites. It also recorded a reduced net income by 17.6% from 2018 and 1.08% from 2019 dry season due to cost of hired labor.

The RCEF-Extension in Bicol and Eastern Visayas was implemented to increase the level of awareness and initiate favorable behavioral change towards RCEF Program. Knowledge products including *Gabay sa Pagpapalay, Sistemang* Palaycheck primer and booklets, and *tekno-kalendaryo*; and RCEF Abaca Face Mask were distributed.

Through RCEF - Building and Strengthening of Farmers' Organizations and Seed Growers Associations (SGAs), 26 new seed growers were recruited and 18 farmers are expected to undergo training on basic inbred rice seed production.

PROJECT 1

Reducing Vulnerability to Climate Change through Rice-Based Farming System Approach

Gian Carlo C. Enot

The project integrated three studies: (1) Development of Climate Change Resilient Upland Rice-Based Farming System; (2) Development of Gender-Sensitive Palayamanan Plus Farming System for Stress-Prone Lowland Rice Ecosystems; and (3) Assessment on the Productivity of the On-station Palayamanan Farming System.

Study 1 aimed to increase rice yield by 1t/ha and increase income by 25% in the upland rice farming system. Two upland sites were established in Brgy. Lubgan, Bula, Camarines Sur, and in Brgy. Inlagadian, Casiguran, Sorsogon.

Under the second study, mushroom production training was conducted in the project site, which was participated by 52 rice farmers.

Meanwhile, the third study showcased five Palayamanan components, which included production of mushroom, vegetable, rice-fish-azolla, and rice and vermicomposting.

Development of Climate Change-Resilient Upland Rice-Based Farming System in Bicol Region

Gian Carlo C. Enot, Hannah Mae M. Olivenza, and Julius M. Vejil

The team established sites in two upland rice-based farming communities in Brgy. Lubgan, Bula, Camarines Sur, and in Brgy. Inlagadian, Casiguran, Sorsogon. The two upland rice communities were characterized based on their farming practices, income sources, and bio-physical characteristics. Moreover, the team identified and established different components of Palayamanan farming system based on the available resources of the community. Vegetable and mushroom production was identified as components. Upland rice yields were recorded and samples were collected from each community.

The study targeted to establish the mushroom production component and to continue the production of vegetables and high value crops. However, enhanced community quarantine constrained the planting of upland rice and sweet potato in Casiguran, Sorsogon project site. Rice seeds were not bought due to the limitations. Meanwhile, the construction of mushroom house in the project site in Brgy. Lubgan, Bula, Camarines Sur was was postponed. Standing crop of upland rice was also damaged by typhoons Quinta, Rolly, and Ulysses. One farmer-cooperator harvested 8 bags of rice from her 0.25ha. Vegetable seeds (squash, eggplant, hot pepper, patola, and okra) were also distributed in Bula.

Development of Gender-Sensitive PalayamananPlus Farming System for Stress-prone Lowland Rice Ecosystems in Bicol Region

Gian Carlo C. Enot, Hannah Mae M. Olivenza, and Julius M. Vejil

The team conducted site selection for the establishment of Palayamanan farming system in drought-prone and saline-prone rice environments. Pamplona (drought-prone) and Canaman (saline-prone) in Camarines Sur were selected as project sites. Focus group discussion was conducted in each site to collect information on rice farming practices, income sources, and the involvement of men and women in rice farming.

The following data were collected in drought-prone environment: rice farm areas range 0.5-2ha; October and November are the planting months for the dry season, July and August for the wet season; rain is the main water source; July, October, and November are the rainy months; dry months are from February to April; yield ranges from 1.8-3.6t/ha, low yield can be attributed to drought; other crops planted are coconut, vegetables, and root crops; rice and coconut farming are the main income sources; other income sources include livestock production, carpentry, and tricycle driving.

The following data were collected in the saline-prone environment: farm areas range 1-3t/ha; rice is established in May for wet season and December for dry season; main water source is from irrigation system that takes water from the Bicol river, which is contaminated with salt-water; September - January are the rainy months, March - May are the dry months; yield range 2-4t/ha in dry season, 1-2.5t/ha in wet season; other crops planted are vegetables, coconut, and nipa; rice farming is the main income source; and other income sources are livestock production, fishing, and working in construction.

In both sites, men are involved in farming activities requiring heavy lifting such as plowing, harrowing, pesticide and fertilizer applications, while women are involved in lighter farm activities such as manual weeding, marketing of produce, buying of farm inputs, and attending to rice farming training.

Mushroom production training was also conducted in each site participated by 19 men and 33 women-farmers.

Assessment on the Productivity of On-Station Palayamanan Farming System

Gian Carlo C. Enot, Hannah Mae M. Olivenza, Julius M. Vejil, Froilan B. Merced, and Rolando R. Bello

The productivity of the on-station Palayamanan and its components were assessed. The components were production of vegetable, mushroom, rice-fish-azolla, and high value crops production, and vermicomposting. Input and output, harvest, and sales of the on-station Palayamanan were recorded and documented for two semesters (January-June and July-October). Eggplants, string beans, okra, squash, bottle gourd, pechay, kangkong, broccoli, cauliflower, lettuce, tomato, sweet potato, patola, hot pepper, bell pepper, peanut, and kangkong were planted along the perimeter of the fishpond, irrigation canal, bunds, and service roads, covering a total of 1,018m^2. The vegetables were planted in sequential cropping pattern.

For the first semester, vegetables produced totaled 90.95kg of fresh, sold at P2,550 with total total expenses of P11,055.00. Net income registered P -8,505.00 with an ROI of -3.34%. Many of the harvested vegetables were given free to the station's staff during the COVID-19 pandemic; thus, low income was generated. In the second semester, 483.75kg of vegetables were sold at P10,671.00 against total expenses of P10,135.00. Net income was recorded at P536.00, with ROI of 5.02%. Many of the vegetables were damaged by three consecutive typhoons that hit the Bicol region.

Meanwhile, high value crops including sweet corn, sweet potato, and cassava were planted in 1,500 m^2, 400 m^2, and 320 m^2, respectively, during the second semester. Sweet corn yielded 398kg of which 248kg was sold; obtaining a gross income of P8,695.00and 11.55% ROI. Sweet potato and cassava are still standing crops.

Mushroom house was completed in November 2020 and mushroom processing started in December with the mushroom spawn provided by DA-Regional Field Office V. Tilapia fingerlings totaling 500 were farmed starting July 2020. Fresh azolla was used as feeds. A compost pit was also constructed where damaged vegetables were used as growing medium of vegetable seedlings. Vermicomposting site was under rehabilitation.

PRISM-Field Monitoring of Rice Areas in the Philippines (Region V and VIII implementation) – *ASD-200-000*

Jean Rochielle F. Mirandilla, Gina de Mesa, and Don Banares

PRISM estimates data on rice area, seasonality/planting dates, seasonal yield, and flood- or drought-affected area by using satellite data, remote sensing, geographical information system (GIS), and crop modelling. This information generated are validated through field monitoring that uses standardized field protocols and smartphone-based data collection forms and applications. A set of field protocols and forms was developed for seasonal field data collection on monitoring field locations, farm profiles, photos, field status, crop growth stages, crop management practices, production, and crop damages due to flood or drought.

In 2020, PRISM monitored over 585 farmers' fields in Region V and VIII. Data on field profile (511), cultural management (449), crop status (3,174), production data (276), and validation points (624) were collected. Three typhoons (Ambo, Quinta and Rolly) were monitored. Field damages caused by the typhoons were assessed in Bicol Region (43 validation points). These validated field data were used for analysis and interpretation of satellite imagery; calibration of the thresholds used for rice classification; and accuracy assessment of rice area, yield, and flooded/drought-affected rice maps. PRISM also collected weekly data on prevailing *palay* price from several key informants per region from September to November. All data and reports were submitted to the PhilRice Management and DA.

Long-Term Soil Fertility Experiment

Gian Carlo Enot and Jonathan D. Tariman

Continuous and long-term use of inorganic fertilizers can have dramatic effects on soil fertility status and sustainability of production. Thus, monitoring the changes in this type of rice cultivation is important and critical in determining system sustainability. The effects of long-term use of inorganic fertilizer on rice productivity, yield gap, and soil fertility were assessed at PhilRice Bicol starting 2019 DS. An experiment was set up in the wet and dry season cropping following the two-factor factorial in Randomized Complete Block Design with three replications using varieties/lines NSIC Rc 160 (V1); NSIC Rc 222 (V2); and PR43504-14-3-1-1 (V3); and 6 levels of N-P-K, i.e., 0-0-0 (F1), SSNM-30-100 (F2), 210-30-0 (F3), 210-0-50 (F4), 210-30-100 (F5), 0-30-50 (F6) for DS, and replacing 210kgN rate with

80kg/ha for wet season. Leaf Color Chart (LCC) readings were collected from F1, F2, and F5 at 28 days after transplanting (DAT), 42 DAT, and 55 DAT. Crop cut yields were collected from 5m^2 per plot and 12 hills plant samples per plot at maturity. Yield gap was computed and the trend was analyzed. During 2020 DS, V3 achieved the highest yield at 4.46t/ha, which is significant at at 5%; followed by V2 (3.7t/ha and V1 (3.37t/ha). Among the treatments, the highest yield was observed in F5 with 4.59t/ha yield that was significantly different to F1 (3.03t/ha). Treatments F2 (3.93t/ha), F3 (4.33t/ha), F4 (3.66t/ha), and F6 (3.5t/ha) have no significant difference with F1. In terms of combined effect of variety and fertilizer treatment, highest yield was observed in V3F5 (6.03t/ha). Yield gaps from 2019 DS to 2020 DS were computed as follows: in V1, the yield gaps are 5.6, 3.09, 4.48, and 6.54t/ha; V2, 5.6, 2.5, 3.54, and 6.3t/ha; V3, 5.6, 2.2, 2.46, and 5.37t/ha. The total N applied for the site-specific nutrient management was 105kg/ha that resulted in yields of 3.45t/ha for V1F2; 3.7t/ha (V2F2); and 4.93t/ha (V3F3).

Multi-Environment and Adaptability Test of Breeding Lines for Abiotic Stresses

Marie Antoinette R. Orbase and Gerry M. Vejel

Plant growth, productivity, and distribution are greatly affected by abiotic stresses such as drought, salinity, and submergence, becoming a more serious concern amidst climate change. Hence, studies on abiotic stress tolerance are prioritized worldwide including the development of tolerant varieties and conduct of experimental field studies. In 2020, adaptability and multi-stress tolerance trials were conducted during the dry and wet season in Brgy. Ponong, Magarao, Camarines Sur where fields are diagnosed with saline and drought stresses. Twenty-two breeding lines and 6 check varieties (stress-tolerant) from different ecosystems (saline, drought, submergence, irrigated, and heat) were tested in Randomized Complete Block Design in 3 replications under wet direct-seeded method. In 2020 DS, moderate to high salinity (1-4ds/m) was recorded from 84 until 111 DAS. Out of 22 genotypes, 6 genotypes showed a yield advantage of $\geq$ 5% over IR29 (highest yielding check) with a recorded advantage of 9-32%. In 2020 WS, moderate to high salinity was also recorded (1-4ds/m). No yield and other agronomic data were gathered due to onslaught of Typhoons Quinta and Rolly.

Promoting Rice Science Through Capacity Enhancement And Technology Information Campaign

Kristine R. Paliza, Denise Bianca Y. Sadullo, and Paulo G. Balintong

The project provides equal opportunities to the men and women-farmers and other stakeholders to increase their knowledge and skills on rice and rice-based farming system. Five PalayAralan sessions, 1 RCEF-FFS, and 4 staff trainings/seminars were conducted while five requests for technical experts' dispatch from partner agency and two requests for station visits were accommodated.

An on-station learning farm showcasing major growth stages of rice, three matured rice production technologies, and certified and farmers seeds were established and maintained in the dry and wet season. Despite onslaught of typhoons and limitations brought about by CVID-19 pandemic, 421 farmers were trained following IATF protocols through technical dispatch and PalayAralan. Training, seminars, Palay-Aralan and field visits received very satisfactory training while technical experts' dispatch were given satisfactory training.

Male and female rice stakeholders had the average knowledge improvement rates of 66% (farmers), 143% (staff), and 106% (other rice stakeholders), respectively. The methods and organization used in providing information to clients were found to be effective although further study is still needed. Forty-seven percent of the attendees were women while 53% were men. The role of men and women in farming was identified through the initial data (Sex Disaggregated Data), which showed that men preferred farm operations while women focused on budgeting. A profile form for male and female attendees will be carried out for future activities to determine the best interventions on attaining gender equality in farming.

Different modalities such as OSIS and PalayTambayan were also employed other than the on-station OSIS. One additional OSIS was established in a farm school in Bicol. Two of the pre-existing OSIS satellites in 6 SUCs and 1 PalayTambayan were also monitored, and knowledge products in these corners were replenished. The station also participated in 3 events, in which PhilRice technologies were displayed and knowledge products were distributed. Thirty-three local government units in Region V and VIII were tapped in distributing knowledge products. Due to the strict health and safety protocols, the stations only reach 500 clients. Despite the new normal set-up, rice and rice-based technologies, awareness campaigns, and updates about the station's initiatives were promoted through the social media.

The DA-PhilRice Bicol Fanpage recorded an increase of 45.5% in likes and follows. As of November 2020, the page reached 5,941, of which 2,792 are women and 3,149 are men. The PhilRice Text Center had 557 new registrants.

Component 1: Enhancing Capacity of Various Rice Stakeholders to Increase Knowledge on Rice and Rice-Based Farming

Kristine R. Paliza, Denise Bianca Y. Sadullo, and Paulo G. Balintong

Five PalayAralan sessions, 1 RCEF-FFS, and 4 staff trainings/seminars were conducted. Five requests for technical experts' dispatch from partner-agencies and 2 requests for station visits were accommodated. An on-station learning farm showcasing major growth stages of rice, three matured rice production technologies, and certified and farmers seeds were maintained. Implementers also trained 223 male and 198 female rice stakeholders through technical dispatch and PalayAralan

Average knowledge improvement rates of 66% (farmers), 143% (staff), and 106% (other rice stakeholders), were recorded, respectively. Forty-seven percent of the clients reached were women while 53% were men.

Component 2: Increasing Rice Science and Technology Awareness Through Information Campaign

Denise Bianca Y. Sadullo, Kristine R. Paliza, and Paulo G. Balintong

One OSIS on-station was monitored and maintained and one OSIS satellite was established in a farm school in Region V. Due to the COVID-19 pandemic, only 2 OSIS Satellites and 1 PalayTambayan were visited for monitoring Local government units were also tapped to assist in distributing knowledge products. A total of 262 clients were reached through three events while 18,523 copies of knowledge products were distributed across Bicol and Eastern Visayas.

Rice and rice-based technologies, awareness campaigns, and updates about the station's initiatives were promoted through DA-PhilRice Bicol Facebook page. The page has 5,941 likes. PhilRice Text Center registered 473 from Region V and 84 from Region VIII.

Selection and Dissemination of Elite Salt-Tolerant Rice Varieties for AFACI Member Countries

Marie Antoinette R. Orbase and Fernando B. Carido

The Philippines has an estimated coastal-saline-prone area of 500,000-600,000ha, of which 200,000ha are considered seriously salt-affected soils based on data from the Knowledge Bank of the International Rice Research Institute. Farmers with rice fields in this ecosystem rely on saline-tolerant varieties to get a good harvest. Although many saline rice varieties have been released in the Philippines, adoption is still low due to lack of seeds and production guides. This project aimed to increase the adoption of saline-tolerant varieties by testing the released varieties in the Philippines and PhilRice and IRRI-developed breeding lines. In 2020, on-farm trials were conducted in dry and wet seasons with field trials under normal (Brgy. Tuliw, Malinao, Albay) and salt-intruded conditions (Brgy. Bariw, Malinao, Albay). Forty-eight breeding lines and varieties were laid out in alpha-lattice design in 2 replications with plot size of 1m2x5m^2. Twenty-three (48%) and 25 (52%) genotypes had yields higher than the mean yield of the population in normal and saline condition, respectively. IR16T1631 and IR18T1063 showed a good potential yield under both conditions. Thirty bags of Salinas varieties were distributed to salt-affected farmers in Albay, Sorsogon and Camarines Sur in 2020 WS. Salt intrusion was recorded at 5 days after transplanting (DATP) causing severe injury to entries while plant survival 6 days after salt intrusion (DASI) ranged from 19 to 90. A delay in maturity from 12 to 42 days was recorded. IR18T1021, IR18T1340, and IR18T1025 showed a lesser delay in maturity. These breeding lines had longer maturity under normal condition 122, 125, and 129 days after sowing (DAS), respectively. Under normal conditions, yield ranged from 2,590-5,424kg/ha with mean yield of 4,031kg/ha. No entries outperformed the highest yielding check (IRRI 154). Moreover, 16 genotypes showed a yield advantage greater than 5% over the mean yield of the population.

Development of an Integrated Crop Management Package in Saline-Prone Areas for Increased Productivity – Bicol

Marie Antoinette R. Orbase, Glenn C. de Peralta, Jay Rupert L. Mendoza, and Gerry M. Vejel

Salinity poses a noxious effect on rice productivity resulting in low yields in coastal areas like in the Bicol River Basin and its tributaries in Camarines Sur. Rice yield decreases by 12% for every unit of salinity level (dS/m) increase (Hanson, 1999). In Bicol Region, the Bicol River Basin System in Camarines Sur affects around 37,184ha of rice fields resulting in low productivity (Babierra et al., 1996). The development of an Integrated Crop Management (ICM) package is one of the best and effective ways to reduce yield loss due to saline stress. To develop and recommend an ICM package for saline-prone areas in Bicol, crop management practices such as varietal adaptability, fertilizer management, and seeding rate in Magarao, Camarines Sur were evaluated from 2018 to 2019. Using the GGE Biplot Analysis, results showed that Salinas 25 (NSIC Rc 470), Salinas 21 (NSIC Rc 462), and Salinas 14 (NSIC Rc 332) were the most stable and high yielding varieties in Camarines Sur in four seasons (2018-2019). Salinas 25 was also selected by the farmers as the most preferred variety. Based on NOPT experiment, 115-10-15kg of fertilizer was needed to achieve a 5t yield target in saline environment. The use of 80kg/ha of seeding rate and drum seeder were also recommended. Validation of the developed package of technologies in 2020 did not push through due to zero seed germination.

Rice Crop Manager Philippines Phase III: Transition to Operational Sustainability for Research and Dissemination from IRRI to DA-2020 *(PhilRice Component)*

Rona T. Dollentas and Agapito E. Lincuna Jr.

Weeds are major constraints in producing good yield in transplanted (TPR) and direct-seeded rice (DSR). If not controlled, harvest can be reduced from 44 to 96% for TPR (Donayre et al., 2016) and 50-90% for DSR (Chauhan et al., 2011). Use of herbicides alone may not be sustainable for long-term use (Ahmed et al., 2014). Thus, RCM + Enhanced Weed Management evaluation trial was established in rainfed system planted with transplanted rice in h 2 seasons with rice-rice cropping pattern. A researcher-managed trial was conducted in 12 farmer's fields at Barangay Tugop, Tanauan, Leyte. Fertilizer recommendation for standard fertility was generated from Rice Crop Manager (http:// cropmanager.irri.org) for field-specific crop and nutrient management practices.

Three treatments are evaluated: FP (farmer's practice-farmer's nutrient and weed management), RCM1 (standard RCM nutrient + farmer's weed management), and RCM2 (standard RCM nutrient + enhanced weed management). A minimum area of 500m2 per treatment plot was applied with RCM1 and RCM2 while the remaining farmer's field was used as FP plot. Treatment fertilizer recommendations in RCM1 and RCM2 were applied during early stage (0-5 or 0-10 DAT) and panicle initiation (26-30 or 33-37 DAT). Timing of application also depends on crop maturity of rice varieties and seedling age at transplanting. All farmer cooperators used inbred rice varieties, mostly NSIC Rc 222. In weed management of modified RCM2, weeds were controlled before treatment fertilizer was applied. Use of post-emergence herbicide followed by one time spot hand weeding approximately 2 weeks after post-emergence herbicide application or 1-2 days before panicle initiation fertilizer was applied.

Crop cut samples were randomly collected in each treatment plot for grain yield data. Researchers gathered three samples per treatment plot and 9 samples from a 1 farmer field trial. Grain yield was expressed in 14% moisture content.

Weed samples were collected in each RCM field trial at approximately 30-35 DAT of the rice crop. Three samples were collected randomly per treatment plot with a dimension of 0.5 x 0.5 (25 m^2) quadrat. Data on weed density (numbers of weeds) and biomass (g) were also gathered. Weeds were classified as broadleaves, grasses and sedges.

National Cooperative Test-Hybrid

Maria Antoinette R. Orbase and Marco C. Pontejo

Rice plant growth, productivity, and distribution are greatly affected by the location/environment. Hence, it is imperative to test new hybrids across environments/locations for national/regional recommendation. Twenty-five hybrids were evaluated for two seasons. The trial was laid out in RCBD with 3 replications. Data on yield and other agronomic characteristics were also collected. In DS, 5 hybrids showed high yield advantage of more than 5% over the highest yielding check for Group II. No hybrids outyielded the highest yielding check for Group I. In WS, no yield data were gathered due to Typhoons Quinta and Rolly.