Guidelines and Style for IRRN Contributors

To improve communication and to speed the editorial process, the editors of the *International Rice Research Newsletter (IRRN)* request that contributors use the following style and guidelines:

Style

- Use the metric system in all papers. Avoid national units of measure (such as cavans, rai, etc.).
- Express all yields in tons per hectare (t/ha) or wlth small-scale studies in grams per pot (g/pot) or grams per row (g/row)
- Define in footnotes or legends any abbrebiations or symbols used in a figure or table.
- Place the name or denotation of compounds or chemicals near the unit of measure. For example: 60 kg N ha; not 60 kg ha N.
- The US dollar is the standard monetary unit for the *IRRN*. Data in other currencies should be converted to US$.
- Abbreviate names of standard units of measure when they follow a number. For example: 20 kg/ha.
- When using abbreviations other than for units of measure, spell out in full the first time of reference, with abbreviations in parenthesis, then use the abbreviation throughout the remaining text. For example: The efficiency of nitrogen (N) use was tested. Three levels of N were . . . *or* Biotypes of the brown planthopper (BPH) differ within Asia. We studied the biotypes of BPH in . . ,
- Express time, money, and measurement in numbers, even when the amount is less than 10. For example: 8 years; 3 kg/ha at 2-week intervals, 7%; 4 hours.
- Write out numbers below 10 except in a series containing 10 or some numbers higher and some numbers lower than 10. For example: six parts; seven tractors; four varieties. *But* There were 4 plots in India, 8 plots in Thailand, and 12 plots in Indonesia.
- Write out all numbers that start sentences. For example: Sixty insects were added to each cage; Seventy-five percent of the yield increase is attributed to fertilizer use.

Guidelines

- Contributions to the IRRN should generally be based on results of research on rice or on cropping patterns involving rice.
- Appropriate statistical analyses are required for most data.
- Contributions should not exceed two pages of double-spaced, typewritten text. Two figures (graphs, tables, photos) per contribution are permitted to supplement the text. The editor will return articles that exceed space limitations.
- Results of routine screening of rice cultivars are discouraged. Exceptions will be made only if screening reveals previously unreported information (for example, a new source of genetic resistance to rice pests).
- Announcements of the release of new rice varieties are encouraged.
- Use common — not trade — names (or commercial chemicals and, when feasible, equipment.
- Do not include references in IRRN contributions.
- Pest surveys should have quantified data (% infection, degree of severity, etc.)

Genetic evaluation and utilization

OVERALL PROGRESS

Performance of IR36 in Bihar, India

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IR36, an early-maturing, high yielding variety, was introduced in Bihar in an IRTP nursery (IRYN-E) in 1977 kharif. From 1977 to 1982 it yielded an average 3.3 t/ha in wet season, while check variety Ratna yielded 2.7 t/ha (Table 1). In the adaptive research farm test during 1981 wet season, IR36 yielded higher than check CR44-35 at four locations (Table 2). In 1979 and 1982 dry seasons, it performed satisfactorily (Table 3).

IR36 matures in 115-120 days and has good grain quality. It has resisted insect and disease problems in Bhar, including bacterial blight, tungro, and brown planthopper. Its short duration makes it useful for multicropping in irrigated systems. Those traits encourage IR36 adoption for general cultivation in Bihar. □

Table 1. Average yield of IR36 at six sites in Bihar, 1977-82 wet season.

Location	Yield (t/ha)		%increase over the check
	IR36	Ratna (check)	
Patna	3.3	2.5	29.2
Pusa	2.9	3.0	–2.8
Kanke	2.6	2.3	10.6
Sabour	2.4	2.8	–14.5
Telaundha	2.9	2.4	23.5
Dhangain	5.3	5.6	6.0

Table 2. Performance of IR36 in adaptive research farms, 1981 wet season.

Location	Yield [a] (t/ha)	
	IR36	CR44-35 (check)
Araria	3.8	3.6
Barbat	2.7	2.0
Nagri	4.2	3.7
Simdega	3.7	3.4

[a] Percentage increase over the check is 15.1.

Table 3. Performance of IR36 in Bihar in 1979 and 1982 dry season.

Test entry	Yield (t/ha) at	
	Patna	Pusa
	1979	
IR36	4.9	3.9
CR44-35 (check)	3.7	3.0
CD at 5%	ns	1.1
	1982	
IR36	5.6	2.4
Cauvery (check)	5.4	3.5
CD at 5%.	7.6	8.8

Preparation of *Oryza pollen* grains for scanning electron microscope analysis

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The morphological features of the pollen grains of different species in the genus *Oryza* are almost uniform. The grains are usually spheroid or ovoid with a single aperture that has a conspicuous operculum at or near its center. Descriptions of rice pollen grain surfaces vary and can be studied best using a scanning electron microscope (SEM).

There are many methods of preparing pollen grains for SEM examination. Some scientists indicate that a fresh pollen grain can be observed directly; others write that acetolysis is necessary. We studied sample preparation for SEM as follows, using pollen grains from six *Oryza* species.

Pollen collection and preservation

A1. Anthers and pollen grains were air-dried.

A2. Anthers and pollen grains were fixed in Carnoy's fluid for 2-3 hours, and transferred to 70% ethanol.

A3. Samples were fixed in 4% glutaraldehyde for 16 hours (0-4ºC), washed with phosphate buffer 1 or 2 times, stored in the same solution, and placed in vials and kept in the refrigerator.