Rice Science for a Better World

What is Organic rice?

Organic rice is rice that is certified by an independent body, to have been grown and processed according to set "organic" standards.

While there is no single **definition** for "organic", most definitions share common elements. For example, "organic" as applied to most field crops generally means that:

- 1. No synthetic or artificial chemical pesticides and fertilizers have been used,
- Soil fertility is maintained through "natural" processes such as growing cover crops and/or the application of composted manure and plant wastes.
- 3. Crops are rotated in fields to avoid growing the same crop year after year in the same field.
- Alternate (non-chemical forms) of pest control are used to manage insects, diseases and weeds – e.g., beneficial insects to prey on pests, mulches to suppress weeds, etc.

Why should I grow organic rice?

"Organic" produce – especially in developed markets – usually receives higher prices. Organic produce is also often considered to be of greater health benefit.

What is involved to growing organic rice?

- 1. You need to follow the strict standards for production and processing as set by the certifying body.
- You may need to develop and submit annual plans showing that you will meet the production and processing requirements of the certifying body
- 3. You can only be certified "organic" if your produce is grown on land, which has been free of prohibited substances (e.g., artificial chemical pesticides and fertilizers) for three years prior to certification.
- The major challenges of growing rice organically relate to nutrient management and weed control. Examples of key practices include:
 - a. Nitrogen is usually provided through the growing of legume cover crops.
 - b. Bone meal is a good source of cheap phosphorus (with a content of around 12%). This is fast acting and lasts up to 6 months. Another source is Rock Phosphate, which has a 33% ratio. With Rock Phosphate you will only get about 10 the first year because it is slow acting and last 3-5 years.



- c. Rice straw and manure are good sources of potassium. Potassium can be high in irrigation water.
- d. Weeds can be reduced through good land leveling, water management, cultivation and crop rotation.
- e. Most insects and diseases can be controlled through the use of appropriate varieties.
- 5. You will need to keep detailed records of methods and materials used in growing or processing organic products to demonstrate that standards have been maintained and audited.
- 6. You will usually require that a third party certifier approved by the national certifying body has annually inspected all methods and materials.

What other factors do I need to consider in producing organic rice?

- Determine the potential market (price and size) for the proposed product.
- Determine whether there is adequate availability of any needed inputs to make the venture economic.
- Determine whether adequate product can be produced to continuously meet the market demand on time and at the quality required.
- Determine facility needs, capital and financing requirements, potential costs and returns.
- Analyze infrastructure needs and costs in ensuring constant and timely supply of product.
- A certification mechanism is required.

For more information:

nternational Rice Research Institute

For an overall view of crop management practices, visit <u>http://www.knowledgebank.irri.org/tropRice</u>. To diagnose problems in the field, visit <u>http://www.knowledgebank.irri.org/ricedoctor</u>.

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rice fact sheets