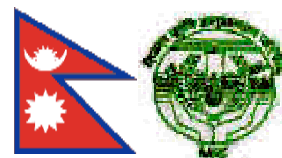


Direct Seeded Rice: A low cost establishment technology



Non-puddled Direct Seeded Rice

It is a cost effective rice establishment method where dry seed is drilled into the non-puddled soil. It includes proper land leveling and effective weed control measures.

Benefits of Direct Seeded Rice

- Avoids repeated puddling, preventing soil degradation and plow-pan formation
- Facilitates timely establishment of rice and succeeding crops as crop matures 10-15 days earlier
- Saves water by 35-40%, reduces production cost by Rs 3000/ha, and increases yields by 10%
- Saves energy: labor, fuel, and seed
- Solves labor scarcity problem and reduces drudgery of labors

Land preparation

- Plow the fields during summer to control emerging weeds
- Leveling the fields well facilitates uniform irrigation and better germination

Machinery Requirement

- Minimum-till drill/Power tiller drill
- Zero-till drill
- Bed drilling

Seed depth and soil moisture

- Optimum depth of seed: 2-3 cm. The seed should be covered by soil for proper germination and to avoid bird damage.
- In lowlands and finer textured soils, planking may not be necessary after seeding.
- Soil moisture content at seeding should be sufficient for proper germination
- Surface mulch: helps retain soil moisture longer to improve emergence and reduce weed menace

Seed rate and cultivars for DSR

- Seed rate: 20 to 25 kg/ha, in general
- Fine grain and Basmati cultivars require much less seed
- Early to medium short duration cultivars having early vigor
- Tested cultivars are: Hardinath1, Sabitri, Sonamasuli, Radha11, and Radha4

Seeding time

- Drill the dry seed of normal rice at the start of monsoon i.e. when farmers put seed into nursery bed
- May 3rd week to June 2nd week (Jesth 1st week to Jesth 3rd week)

Weed management

- Pre-germinated weeds can be knocked down with glyphosate/grammoxone (at 0.5% two days before seeding) or by 1-2 very shallow ploughings (stale seed bed method)
- Second flush of weeds can be removed manually

For more information

Visit the Nepalese Rice Knowledge Bank at

www.knowledgebank.irri.org/regional_Sites/Nepal/default.htm

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