

Spinach:

Climate & Soil:

- Climate: Cool and dry climate is ideal
- Temperature: 15–25°C
- Soil: Well-drained loamy soil rich in organic matter
- pH: 6.0–7.5

Land Preparation:

- 1–2 deep ploughings followed by harrowing
- Add well-decomposed FYM @ 4–5 tons/acre
- Prepare fine tilth and form beds/lines

Seed Rate:

- 2–3 kg per acre (depending on seed type)

Sowing:

- **Spacing:**
 - Line sowing: 20–25 cm between rows
 - Plant to plant: 5–7 cm
- **Depth:** 1.5–2 cm
- Can be sown throughout the year except peak summer

Fertilizer Management:

Basal Dose (acre):

- Nitrogen (N): 20 kg
- Phosphorus (P_2O_5): 16 kg
- Potash (K_2O): 12 kg

Top Dressing:

- Apply 10 kg N after first harvest for continuous picking

Irrigation

- Light irrigation immediately after sowing
- Maintain moist but not waterlogged soil
- Irrigate every 4–5 days in winter, 2–3 days in summer

Weed & Pest Management:

Weeds:

- Hand weeding 15–20 days after sowing
- Keep beds clean for tender leaves

Common Pests & Diseases:

- **Leaf miner, aphids**
 - Spray neem oil 3–5 ml/L
- **Leaf spot, damping off**
 - Avoid excess irrigation, use seed treatment before sowing

Harvesting:

- First picking: 20–25 days after sowing
- Subsequent harvesting every 7–10 days
- For bunch type: uproot whole plant
- For leaf-pluck type: cut leaves 2–3 cm above ground

Expected Yield:

- 45–60 quintal per acre (depending on variety & management)