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PRODUCTION GUIDELINES / SOUTH AFRICA

Leeks



ESTABLISH EVENLY. BLANCH CAREFULLY. KEEP FRESH.

Practical guidance for baby and full-size leeks: plan the white shank, manage steady growth and deliver clean, crisp produce.

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PLAN THE CROP

Grow for the required shank

Scope: Allium ampeloprasum var. porrum, also called Allium porrum. Leeks are sold for overlapping leaf sheaths, not a dry storage bulb.

Decision / crop	Practical guidance
Baby leeks	Agree diameter, length, trim and bunch mass. A baby product needs its own stand and harvest plan.
Full-size leeks	Confirm white-shank length, diameter, straightness, leaf colour and permitted basal swelling.
Cultivar	Choose for local season, market size, shank form and field-holding ability. Trial alternatives before replacing a proven crop.
Season	Allow a long growth period; many cultivars need roughly 120-150 days, while faster types differ. Confirm whether supplier maturity is counted from sowing or transplanting. [1]
Capacity	Plan nursery lead time, hilling access, lifting, washing, trimming, cooling and transport before sowing.

Select well-drained ground

Prefer a friable soil that can be worked around the stems without forming large clods. UMN gives pH 6.0-7.0 as a reference. Test soil before amendments and review previous allium crops and drainage problems. [1]

Budget accepted output

Record plants established, plants lifted, trimming loss and accepted pack mass. Do not use historic yield or price claims as a current business forecast. Obtain current quotes and a buyer specification for the actual season.

Crop-plan decision: target grade / cultivar / planting window / planted area / harvest labour / pack / customer and delivery frequency.

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ESTABLISH & BLANCH

Build a clean white shank

Choose direct sowing or transplants to suit the season, equipment and weed pressure. Inspect seed and nursery lots before planting.

Use a spacing reference, then trial it

The 2026/27 commercial guide uses about 50-75 cm between rows and 10-15 cm between plants. These are reference dimensions: adjust for baby or large leeks, cultivation equipment and target diameter. [2]

Decision / crop	Practical guidance
Seedbed	Prepare an even, firm surface with good seed-to-soil contact. Calibrate with the actual seed lot and maintain seed-zone moisture.
Transplants	Set healthy, uniform plants upright and settle soil around the roots. Avoid unnecessary root injury.
Blanching	Gradually bank soil around growing shanks or fill planting furrows. Keep the leaf junction and growing centre clear of soil. [1]
Weeds	Control weeds early with shallow cultivation or another suitable method. Young leeks compete poorly, and deep cultivation can damage roots. [3]

Count the real stand

Example only: 0.60 m rows x 0.12 m in-row spacing gives about 138,889 plants per planted hectare. Exclude headlands and paths. For direct sowing, divide the required stand by expected germination and field survival to calculate seed numbers.

Blanching check: white-shank length / soil trapped in leaves / stem damage / drainage / access. More soil around the plant is not automatically better quality.

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WATER & NUTRITION

Support steady leaf growth

Use a soil and water analysis and a crop-specific nutrient programme. A fixed foliar mixture cannot replace root-zone nutrition.

Monitor the active root zone

Leeks have a shallow fibrous root system and respond poorly to water stress. Check wetting depth and uniformity, then adjust irrigation for rain, soil and crop size. Avoid persistent saturation and unnecessary wetting of foliage. [1, 3]

Decision / crop	Practical guidance
Establishment	Check moisture at several points in the seedbed or transplant row. Inspect dry patches and crusting before blaming the seed lot.
Water quality	Review EC, alkalinity, sodium, chloride and boron with an adviser. Water pH alone cannot describe salinity or suitability.
Nutrients	Set phosphorus and potassium from soil testing and schedule nitrogen for measured growth. The commercial guide gives the farm nutrient plan priority over generic tables. [2]
Yellow leaves	Inspect roots, moisture delivery, pests and pattern of symptoms before prescribing nitrogen or trace elements.
Foliar applications	Use only a justified correction compatible with the crop and product label. Avoid fertiliser accumulation in leaf folds.

Keep units clear

One millimetre of irrigation over one hectare equals 10,000 litres. Record water depth or volume together with the treated area; “mm per hectare” is not a useful crop-water unit.

Weekly record: rainfall / irrigation / root-zone observations / nutrient amounts / stand / shank diameter / next action.

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CROP HEALTH

Inspect leaves and roots

Scout from establishment through harvest. Foreign pest lists do not prove that every listed insect occurs on the farm.

Decision / crop	Practical guidance
Silvered or distorted leaves	Inspect leaf folds for thrips and identify the pest. Record infestation and injury by block. [3]
Leaf spots or pustules	Photograph both leaf surfaces and retain affected samples. Different foliar diseases need different management.
Weak plants or rotting bases	Check drainage and root injury alongside possible infection. Keep diseased plants out of harvest containers.
Nematode concern	Stem and bulb nematode can affect leeks and other crops. Use diagnostic testing and clean planting material; choose rotations for the identified pest. [4]
Seedling losses	Review emergence moisture, temperature, planting depth and roots. Map gaps and compare affected areas with healthy rows.

Reduce carryover

Record field history, remove crop waste appropriately and clean soil from tools and equipment before moving between suspect and clean fields. Select the next crop using confirmed diagnosis rather than assuming every non-allium is a suitable break crop.

Fit protection to the harvest plan

Verify current South African registration for leeks and the target. Follow label rates, re-entry and preharvest intervals, and check buyer residue requirements. Keep each treatment linked to the block and harvest lot. [5]

Scouting note: date / block / plant part / symptoms / extent / diagnosis or sample number / action / review date.

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HARVEST & COOLING

Lift gently. Clean thoroughly.

Harvest when sampled plants meet the buyer specification. Field holding is conditional on cultivar, weather and health, not a guaranteed storage method.

Loosen roots before lifting

Undercut or loosen the soil so plants lift without tearing. Keep damaged, bolted and decayed plants separate. Trim roots and leaves to the agreed grade and inspect between outer sheaths for soil. [2]

Decision / crop	Practical guidance
Cleaning	Use suitable food-contact water and clean equipment. Avoid excessive pressure that damages tissue or spreads contamination.
Grade	Check white length, diameter, straightness, leaf freshness and trim. Record discarded sheaths and rejected plants.
Cooling	The commercial guide recommends about 0°C and 95-100% relative humidity. Avoid freezing and manage condensation. [2]
Market life	Typical storage guidance is 7-21 days; longer holding is possible under selected conditions. Validate the actual lot rather than promising months. [2]
Packing	Use clean packs that limit compression and moisture loss while allowing the selected cooling method to work.

Dispatch with a lot record

Record block, harvest date, accepted mass, pack count, cooling time, product temperature and customer. Inspect a retained sample through the expected selling period and use the results to improve harvest timing.

Final check: clean shanks / consistent grade / sound leaves / correct pack / temperature / lot code / delivery slot.

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FILLABLE CROP PLANNER

Your next planting

Save a copy before filling it in. Use a PDF reader that supports forms and keep the completed record with your field documents.

Farm / block / previous allium crops

Cultivar / seed or nursery lot

Sowing / transplant / target harvest window

Row spacing / planted area / target stand

Buyer / white shank / diameter / pack

Soil and water results / nutrient plan

Next action / responsible person / due date

Ready-to-plant checks

- [ ] Buyer grade confirmed
- [ ] Seed and nursery checked
- [ ] Spacing and hilling planned
- [ ] Irrigation measured
- [ ] Crop health reviewed
- [ ] Wash and cooling ready

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REFERENCES & EDITION NOTES

Sources you can follow

Independent sources reviewed on 17 September 2026. Links are clickable. Older sources support established principles; overseas dates and product approvals are not transferred to South Africa.

01. UMN Extension - Growing Leeks
Soil, rooting, blanching and crop establishment.

02. Mid-Atlantic Commercial Recommendations - Leeks (2026/27)
Commercial spacing, nutrient planning and postharvest guidance.

03. USU Extension - Leeks (2020)
Early weed competition, water stress and pest recognition.

04. UMN Extension - Stem and Bulb Nematode
Host range, testing and clean planting material.

05. SA Department of Agriculture - Residue requirements
Check crop-specific approvals, records and destination requirements.

About this edition. Original AgriCart editorial synthesis for planning and education. Obtain farm-specific advice before setting inputs and crop-protection programmes. No yield or shelf-life guarantee is implied. Cover image is AI-generated illustration, not a documented farm or named cultivar. Source organisations do not endorse AgriCart.