

TECHNICAL BULLETIN REF. KESTREL: 31/07/2014

KESTREL

F1 Hybrid Garden Beet

OUTSTANDING QUALITIES

- ADAPTED TO WARM SEASON PRODUCTION
- EXCELLENT FOR BABY BEET
- EARLY MATURING IN COOL SEASON
- UNIFORM ROOTS
- SUPERIOR FLAVOUR
- EXCEPTIONAL QUALITY

Kestrel is a F1 hybrid for cool season production with uniform, round roots and refined crowns and taproots. **Kestrel's** hybrid vigour leads to early, uniform plant establishment resulting in high scores for earliness and yield potential in bunched, topped and processing trials. **Kestrel** develops its shape and outstanding interior colour at an early stage. **Kestrel** excels for baby beet production as well mature beet production. Due to intermediate resistance to various leaf diseases, tops remain erect and healthy



for optimum production and high appeal in bunching. The overall vigour of **Kestrel** tends to make it less susceptible to diseases. **Kestrel** has intermediate resistance to Leaf spot (Cb), Downy mildew (Pfb) and Powdery mildew (Ep).

SPECIAL VARIETAL REQUIREMENTS

- Kestrel is recommended for cool season production, but extreme cold should be avoided
- We do not recommend sowing during April, May and June for most areas
- Contact area representative for a sowing guide

CHARACTERISTIC*	KESTREL
KIND	F1 garden beet hybrid (<i>Beta vulgaris</i> L. subsp. <i>vulgaris</i> var. <i>conditiva</i> Alef.)
MATURITY	90 – 110 days for cool season production
SEASON	Cool
ROOT SHAPE	Round
CROWN SIZE	Small
SMOOTHNESS	Very smooth
INTERNAL COLOUR	Dark red
ZONING	Very light
SUGAR CONTENT	High (9 – 10 %)
TOP HEIGHT	30 – 33 cm
LEAF HABIT	Erect
LEAF COLOUR AND GLOSS	Bright green / medium gloss
PURPLE IN LEAF (BETALIN PIGMENT)	Low
BOLTING HABIT	Very slow to bolt
DISEASE REACTION (SCIENTIFIC)	Intermediate resistance: Cercospora beticola (Cb), Peronospora farinosa f.sp. betae (Pfb), Erysiphe polygoni (Ep)
PLANT POPULATION	450 000 - 550 000 seeds per ha for normal roots 600 000 - 800 000 for baby beet production
UNIFORMITY	Very good
MARKET USE	Fresh market, processing, pre-packing and baby beet
SPECIAL FEATURES	High yield, good disease resistance, refined round shape, well suited for baby beet production. Good resistance to leaf diseases
* Characteristics given are affected by production methods such as soil type, nutrition, planting population, planting date and climatic conditions. Please read disclaimer.	

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similar environmental conditions and pest or pathogen pressure. Resistant varieties may exhibit some disease symptoms or damage under heavy pest or pathogen pressure (HR = High resistance, IR = Intermediate resistance).

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GENERAL TIPS FOR BEET PRODUCTION

Fertiliser requirements Macro-nutrients

Soil tests are the most accurate guides to fertiliser requirements. Soil should be tested at least every two to three years, however many farmers prefer to check this every season. Nitrogen does not accumulate in soil over time, so it should be applied annually. A representative soil sample of the whole field should be taken for more accurate results.

Good management practices are essential if optimal fertiliser responses are to be realized. These practices include use recommended varieties, selection of appropriate soils, good weed control, disease and insect control, good seed bed preparation, proper seeding methods and timely harvest.

Lime

Lime applications should be made when the soil pH is 5.8 or below, or when calcium levels are below 7 meq (milli equivalent) Ca/I00 g soil.

Lime should be mixed into the soil several weeks before planting and preferably the previous autumn. A lime application is effective over several years.

For acid soils low in magnesium (less than 1.0 meq Mg/100 g soil), 2.25 tonnes per hectare of dolomitic lime can be used as a Mg-source. Dolomite and ground limestone have about the same ability to neutralise soil acidity.

Nutrient Deficiencies

Nitrogen (N): Purpling or yellowing of older leaves usually accompanied by retarded growth of roots and plants. Variation from purple to yellow is associated with temperatures.

Molybdenum (Mo): Patches on the leaf die and become papery.

Phosphorus (P): Leaf blade unusually flat. Prominent purple venation even to finest veins, leading to a bronze look. New leaves are purple, small and erect.

Sulfur (S): Young leaves are narrow, very brittle and erect. They appear yellow and are densely speckled with purple spots, which eventually coalesce, making whole leaf purple.

Potassium (K): Old leaves become limp and die back from tip.

Calcium (Ca): Young leaves have purple-black, hooked tips, which later die and exhibit leaf roll.

Magnesium (Mg): Interveinal chlorosis (yellowing) with reddish tinting on older leaves. At times chlorosis is not observed but interveinal red mottling. Later, brown blisters with purple edges are seen on intermediate aged leaves. If Mg levels are low at more mature growth stage, a pronounced convex bubbling of the leaf lamina between the veins makes midrib appear deeply recessed.

Iron (Fe): Young leaves appear bleached while older leaves have a reddish tint.

Manganese (Mn): Leaves triangular in shape with margins curled inward and severe interveinal speckling. Older leaves are chlorotic and fade to reddish colour with brown interveinal tissue. Roots reduced in size.

Boron (B):

Canker-scattered black lesions in the flesh of the root, sometimes with large black areas on root surface. Lack of moisture aggravates boron deficiencies. Boron should not be banded; instead, it should be applied evenly over the field.

Disease resistance definition

Resistance: is the ability of a plant variety to restrict the growth and development of a specified pest or pathogen and/or the damage they cause when compared to susceptible plant varieties under similar environmental conditions and pest or pathogen pressure. Resistant varieties may exhibit some disease symptoms or damage under heavy pest or pathogen pressure. Two levels of resistance are defined:

High/standard resistance (HR): plant varieties that highly restrict the growth and development of the specified pest or pathogen under normal pest or pathogen pressure when compared with susceptible varieties. These plant varieties may, however, exhibit some symptoms or damage under heavy pest or pathogen pressure.

Moderate/intermediate resistance (IR): plant varieties that restrict the growth and development of the specified pest or pathogen, but may exhibit a greater range of symptoms or damage compared to resistant varieties. Moderately/intermediately resistant plant varieties will still show less severe symptoms or damage than susceptible plant varieties when grown under similar environmental conditions and/or pest or pathogen pressure.

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