

DARK RED CHIEFTAIN

Agronomic Highlights – Irrigated

Dark Red Chieftain is a Maincrop that produces deep red skinned uniform potatoes. It is semi tolerant to heat and drought stresses. It produces a high marketable yield of uniform medium to large round tubers. The skin color does not dissipate during storage.

SEED MANAGEMENT:

Dark Red Chieftain has a medium to long dormancy. Maintain seed dormancy until just prior to cutting and planting. Ensure seed is > 42 F when handling. Tubers should be showing signs of “pipping” just in advance. Seed should be cut to a target seed size distribution of 75-85 % between 1.5 – 3.0 ounces and minimize seed piece less than 1.5 oz. in weight. Average seed piece weight targets should not be targeted as it is highly dependent upon the mother seed lot size. Dark Red can be pre-cut and suberized.

Use of a seed piece treatment that gives excellent control of Rhizoctonia, Fusarium, Silver scurf is highly recommended. The use of an in-furrow fungicide is recommended.

IN ROW SPACING:

[Irrigated Spacing: 10.5-11.0 inch]

This is based on linear row planting, not bed plantings. If a smaller run is desired, Dark Red Chieftain can be planted in a bed planting system to achieve this. Dark Red Chieftain does not produce a high percentage of tubers > 3.0 inch diameter even at 11.0 inches in row.

STRENGTHS:

Common scab, Hollow Heart, Secondary Growth, Mechanical damage, excellent skin color from long term storage, Tuber shape.

FERTILITY

P, K, Mg and micros nutrients are to be based on local soil tests results, crop yield estimates and nutrient removal rate. Yield targets of 450-475 cwt/acre should be used.

However, Dark Red Chieftain does not require a larger amount of N compared to other red skinned varieties. Excessive N rates will delay maturity and affect skin set.

A total N rate of 130-135 lb/acre is common for commercial production. ~ 90-100 lb/acre N should be applied to the crop by planting. The balance of the N can be applied through the irrigation system. Adjust soil or rotation N credits in the total N amount.

It is recommended that a portion of the N is applied through the irrigation system, upwards of 20-30 lb/acre. Additional N through the irrigation system should begin at tuber initiation and rates of ~10-15 lb/acre per week until total N target is reached.

COMMENTS:

Dark Red Chieftain sets ~12-14 tubers per plant.

Dark Red Chieftain produces 3.0-4.0 stems per plant

It can require up to 21-28 days from top-kill to harvest. Ensure tubers are mature before harvest.

Avoid planting in sandy type soils or fields with a high level of undecomposed residue.

Avoid planting where the crop matures in high daytime or night time temperatures.

Do not allow the vines to naturally senesce. Ideally the vines should be “lime green” when top-killed.

Top-kill should be quick, ideally by mechanically flailing or sulfuric acid.

Harvest tubers when the tuber temperature is > 45 F or < 60 F to prevent black spot bruising.

Avoid mechanical damages.

If Dark Red Chieftain is to be stored for long term, use of a post-harvest fungicide is suggested.

2,4 D Ester can be used, starting when the tubers are the size of a “pea”. Usage may help smoothen out the skin texture.

DISEASE(S):

Dark Red Chieftain requires a standard Late Blight and Early Blight fungicide program that is typical in the production area.