

NADINE

Agronomic Highlights – Dry Land

Nadine is a very high yielding Maincrop maturing variety(95-105 DAP) that has a white skin and cream flesh. It is semi tolerant to heat and drought stresses. It produces very high total and marketable yields. Nadine produces uniform medium to large oval tubers with a bright skin finish.

SEED MANAGEMENT:

Nadine has a medium dormancy. Maintain seed dormancy until just prior to cutting and planting. Ensure seed is > 42 F before handling. Tubers should be showing signs of “pipping” just in advance of planting. Do not de-sprout the seed. 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. Nadine can be pre-cut and suberized. **The use of a drying agent at seed cutting is highly recommended**

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. Avoid off type cuts from the seed cutter.

IN ROW SPACING:

[Dry Land Spacing: 13.0 – **14.0** inch]

This is based on linear row planting, not bed plantings.

It is not suggest to plant Nadine in a bed planting system unless a small tuber profile is desired.

Nadine can produce a moderate percentage of tubers > 3.0 inch diameter if the in-row spacing is at 14.0 inch.

STRENGTHS:

Common scab, Hollow Heart, Secondary Growth, Mechanical damage, excellent skin finish retention from storage.

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 450-500 cwt/acre should be used.

However, Nadine does not require a large amount of N compared to other White type varieties. Higher N rates will delay maturity and skin set.

A total N rate of 155-175 lb/acre is common for commercial production on mineral soils, ideally all applied by planting. Allow soil or rotation N credits in the total N amount. Avoid high levels of N application before tuber initiation

Compensate N for high C:N rotation crops (corn, sudan grass...)

Sandy soils (CEC 5-8) may require an additional 10-15% more total N. Monitor N levels using petiole N sampling on a weekly basis beginning after 40-45 DAP.

Petiole N levels should be 19000-22000 from 45-55 DAP. Then maintain N levels at ~15000-17000 ppm during early bulking (55-75 DAP)

Ideally when possible, the use of potassium sulfate should be considered as a substitute for potassium chloride or minimize the usage of chloride based sources

COMMENTS:

Nadine sets ~14-20 tubers per plant depending on the cut seed type.

Nadine produces 3.5-4.5 stems per plant

Avoid planting dates that would allow Nadine to initiate tubers when the soil temperatures are < 55 F

Minimize field conditions that would allow standing water.

It can require up to 14-21 days from top-kill to harvest. Ensure tubers are mature before harvest.

Avoid harvesting in dry soil conditions.

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

Avoid mechanical damages.

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

Nadine respnds well to foliar applied N. Application should begin at 60-65 DAP up to 90 DAP, applied weekly

DISEASE(S):

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

Avoid planting Nadine in fields with a known history of compaction, poor drainage and powdery scab.

Maintain good insect control (aphids) throughout the growing season.

Maintain good control of Black dot