

MANISTEE

Agronomic Highlights – Irrigated

Manistee is a high yielding early Maincrop variety (95-105 DAP) that has a lightly netted skin and creamy white flesh. Maturity is similar to Atlantic. Manistee produces bold, uniform round shaped tubers with a high marketable yield. It is semi tolerant to heat and drought stresses but requires slightly more N fertility than Snowden (5-10%).

SEED MANAGEMENT:

Manistee has a medium-long dormancy, similar to Atlantic. 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 of planting, if not, a delay in emergence may occur. There have been no issues with de-sprouting before cutting. 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. **The use a drying agent at seed cutting is recommended.**

Minimize bruising during handling.

Manistee 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:

[Dryland Spacing: 10.0 – 10.5 inch] This is based on linear row planting, not bed plantings Slightly closer than Snowden.

Manistee can produce a high percentage of tubers > 3.0 inch diameter if the in-row spacing is > than 10.5 inch

STRENGTHS:

Common scab, Hollow Heart, Rhizoctonia, Secondary Growth, Mechanical damage, good smooth skin finish. Better chip color from late season storage. Better blackspot bruising tolerance than Snowden. Low incidence of internal defects

FERTILITY

P, K, Mg and micros nutrients are to be based on local soil tests results, crop yield estimates and nutrient removal rate.

Avoid excessive use of K nutrition which may suppress dry matter content.

Yield targets of 350-400 cwt/acre should be used, frequently 10-15 % higher than Snowden

Manistee does require a sufficient amount of N compared to Snowden, approximately 5-10% more N no later than tuber initiation stage

Excessive N rates may delay maturity and skin set, reduce specific gravity and affect long term chip color

A total N rate of 170-185 lb/acre is common for commercial production in dryland production, ideally all applied by planting. Allow soil or rotation N credits in the total N amount. Compensate N for high C:N rotation crops (corn, sudan grass....)

Sandy soils (CEC 5-8) may require 15-20% more total N. Monitor N levels using petiole N sampling on a weekly basis beginning after 40-45 DAP. Maintain 15-20000 ppm of N from 50-70 days after planting.

COMMENTS:

Manistee sets ~ 10-12 tubers per plant, slightly fewer than Snowden

Manistee produces ~ 2.9-3.2 stems per plant, slightly fewer than Snowden

Minimize field conditions that would allow for standing water.

It can require up to 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.

Manistee will emerge and develop slightly faster than Snowden but after 75-80 DAP can begin to mature sooner than Snowden if N fertility is not adequate

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

Pre-condition above 54-56 F and slowly lower and store at 48-50 F

Manistee will chip consistently from early storage onward to April-May, better from later storage than Snowden for an extended period of 3-5 weeks longer than Snowden

Manistee has a specific gravity very similar to Snowden.

DISEASE(S):

Manistee has no specific disease resistances and requires a standard Late Blight and Early Blight fungicide program that is typical in the production area.

However, if Late blight pressure is high a more proactive fungicide program is required.

Avoid fields with a known history of common scab although Manistee has a better scab tolerance rating than Snowden