

HARMONY

Agronomic Highlights – Dry Land

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

SEED MANAGEMENT:

Harmony has a medium to long 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. Harmony 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: 9.5-10.0 inch]

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

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

Harmony can produce a moderate percentage of tubers > 3.0 inch diameter if the in-row spacing is > 10.0 inch

STRENGTHS:

Common Scab, Black dot, Skin spot, moderate Dry Rot, Hollow Heart, Secondary Growth, Mechanical damage, No tuber splitting, 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 400-450 cwt/acre should be used.

However, Harmony 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 160-175 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)

COMMENTS:

Harmony sets ~10-12 tubers per plant depending on the cut seed type.

Harmony produces 2.5-3.5 stems per plant

Avoid planting dates that would allow Harmony 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 Harmony is to be stored for long term, use of a post-harvest fungicide is suggested.

Avoid planting Harmony in light textured soils without irrigation possibilities

Harmony responds to foliar applied N beginning at 65-70 DAP in dry land production regions. Apply N weekly until ~90 DAP

AVOID large amounts of N before tuber initiation

DISEASE(S):

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

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

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

Harmony is **SENSITIVE** to Metribuzin herbicide