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Selecting Potato Varieties in Michigan

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VARIETY SELECTION IS ESSENTIAL to the production of a top quality potato crop whether for commercial production or the home garden. The variety selected must be adapted to the soil and cultural conditions under which it is grown and acceptable for the chosen market outlet.

The two accompanying tables describe some of the characteristics of several potato varieties.

Table 1 summarizes the characteristics of those varieties available to the industry for some time and several years observations recorded.

Table 2 identifies characteristics for the newer releases with fewer observations and data on commercial use.

These lists do not include all available potato varieties and are restricted to those varieties favorable to Michigan production and marketing.

Table 1. Characteristics of Established Potato Varieties.

Variety	Maturity	Skin Color	Dry Matter	Disease Resistance	Best Market Use	Remarks
KATAHDIN	Late	White	Med.	Mild mosaic Net necrosis	Fresh market (home garden)	Wide range of adaptability to soil, climate and cultural conditions. Very susceptible to scab and should not be grown where scab is a problem.
KENNEBEC	Medlate	White	High	Late blight Net necrosis	Chip processing (home garden)	Very susceptible to Verticillium wilt and should not be planted on soils with this problem.
MONONA	Medium	White	Low	Mild and rugose mosaic	Chip processing	Reconditions well for chips.
NORCHIP	Medium	White	High	Some to scab	Chip processing Fresh pack	Sets heavy—suggest a spacing of 11-12". Tubers susceptible to late blight. Has short rest period.
NORGOLD RUSSET	Early-med.	Russet	Med.	Scab	Fresh market	Susceptible to hollow heart and blackleg.
NORLAND	Early	Red	Low	Some to scab	Fresh market (home garden)	Has been very susceptible to speckle leaf. Has good tuber shape. Red color intensity decreases with delayed harvest after maturity.
ONAWAY	Early	White	Low	Scab Late blight	Fresh market Poor processor (home garden)	Tubers susceptible to early blight. Suggest spacing of 8" to control over size and shape.
RUSSET BURBANK	Late	Russet	High	Some to scab	Baking, French fries, dry and frozen processing	Should not be grown on poorly drained and heavy soils. Can be rough and knobby.
SEBAGO	Late	White	Med.	Mild mosaic Late blight Some to scab	Fresh market Chip processing (home garden)	Good all purpose potato. Susceptible to black- leg under adverse planting conditions.
SUPERIOR	Early	White	Med.	Scab	Fresh market Chip processing (home garden)	Very good tuber shape and appearance.

Table 2 — Newer Potato Variety Releases (1976 - 1978)

Variety	Year Released	Release Agency	Characteristics	Tuber Type	Michigan Use*
CENTENNIAL RUSSET	1976	USDA and Colorado	Reported resistance to early and late blight and Verticillium wilt. May be susceptible to scab. Best use fresh market; low dry matter; does not pro- cess well.	Oblong russet and slightly flattened.	Not recommended because of poor yield.
ATLANTIC	1976	USDA, Florida, Virginia, New Jersey and Maine	Medium late maturity; immune to PVX and net necrosis from current season leaf roll infection; resistant to late blight; moderate resistance to scab and resistant to golden nematode. High yield and high specific gravity for fresh market and chip processing. Hollow heart and/or heat necrosis have been observed in some locations.	Blocky round with heavy net and shallow eyes.	Commercial trial but on limited basis at first to determine incidence to hollow heart and/or heat necrosis.
ONEIDA	1977	Wisconsin	Medium late maturity and scab tolerant. Suitable for fresh market or chip processing.	Smooth, round-oval tubers with light flaky russeting.	Commercial trial.
BUTTE	1977	USDA, Idaho, Oregon and Washington	Late maturity; resistant to net necrosis and PVX. Similar to Russet Burbank in susceptibility to scab, early blight, Verticillium wilt, corky ringspot and leaf roll, but more susceptible to Fusarium dry rot. Suitable for fresh market and frozen processing.	Long russet similar to Russet Bur- bank, except less tendency to knobs and off type.	Limited commercial trial
BELCHIP	1978	USDA, Florida, Virginia, New Jersey and Maine	Medium late maturity; immune to PVA and PVX; resistant to golden nematode; race 0 of late blight and tuber net necrosis. Medium high specific gravity.	Smooth, blocky and flattish with slight netted skin and shallow eyes. Tuber shape not as uniform as Atlantic.	Observation only.
BELRUS	1978	USDA, Florida and Maine	Medium late maturity; immune to PVA; field resistance to leaf roll; resistant to tuber net necrosis and tolerant to common scab and Verticillium wilt.	Long, smooth dark russet tubers with prominent white eyes. Sets heavy and in preliminary Michigan trials, the yield has been low.	Observation only.
DENALI	1978	Alaska	Late maturity; high yield and very high specific gravity. Some resistance to rhizoctonia and common scab.	Smooth, oval to oblong and buff colored.	Limited commercial trial.
MICHIMAC	1978	Michigan	Late maturity; high yielding variety with medium specific gravity. Disease resistance not known.	Smooth, oval and buff colored. Well shaped large tubers seldom hollow.	Commercial trial.

^{*}Observation only = generally no substantial Michigan performance data.

Limited Commercial Trial = some Michigan data which indicates merit for small planting to evaluate commercial acceptability.

Commercial Trial = Michigan performance data has been favorable.

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