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Sweet Corn: Commercial Vegetable Recommendations

Michigan State University Extension Service

Replaces E-675R

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Issued January 1993

6 pages

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# SWEET CORN

Extension Bulletin E-1673 (Replaces E-675R), January 1983

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**PRODUCTION:** Average yield in Michigan is 3 tons per acre; good yield is 8 tons per acre (120 to 320, 5-dozen crates or bags per acre.)

**USE:** All sweet corn grown in Michigan is used for fresh market. Much of it is sold on roadside and city markets, and in local stores.

## Sweet Corn Types and Colors

Developments in corn genetics during the past few years have resulted in production of a number of different types of sweet corn. Most of the new types are sweeter than standard (sugary) sweet corn, and have different genetic backgrounds. Table 1 lists the types of sweet corn and varieties of each that are presently available. Sweet corn is unique among vegetable crops in that the pollen source has an effect on the characteristics of the current year's crop. For instance, field corn pollen will make sweet corn starchy. In the same way, pollen from some of the new, sweeter types makes other types starchy. When non-compatible types of corn are being grown, some effort must be made to isolate them. Table 2 lists isolation requirements of sweet corn presently available.

Because of their genetic and physical makeup, seeds of some of the sweeter hybrids germinate slowly in cold soils. Seed catalogues usually mention this limitation. When it is a problem, plant seeds shallower so that they warm up faster and irrigate lightly so that sufficient moisture is available for germination. An alternative is to plant later in the spring when soil temperature is above 60°F. Some of the sweeter types have a lower than average germination rate. The germination rate should always be listed on the seed package. Compensate for a low germination rate by planting more seed per acre.

Sweet corn comes in three colors: yellow, white, and bicolor (yellow and white). Pollen from yellow and bicolor varieties will cause yellow kernels in white corn, but flavor and sweetness are not affected. Pollen from yellow varieties will reduce the percentage of white kernels in bicolor corn. Pollen from white corn has no effect on yellow or bicolor

corn. There is no relationship between color and sweetness. Most of the new, sweeter hybrids are yellow, although a few are bicolor or white.

Cross pollination can be reduced by separating with space or according to time of pollination. To maintain color of white and bicolor corn, and sweetness of sweeter types requiring isolation, follow these guidelines:

1. Separate plantings of different types of corn by 250 feet.
2. If wide separation is not possible, do not plant a variety downwind from one that can contaminate it.
3. Separate different types of corn by maturity date or date of planting. A minimum of 14 days between maturities will eliminate nearly all cross pollination.

TABLE 1. Sweet corn classification<sup>1</sup>.

Names and genetic designation of type	Example varieties
1. Standard sweet corn, sugary, su	Sundance, Gold Cup, Silver Queen, NK199
2. Extra sweet, super sweet, brittle, bt, shrunken, sh	Candyman, Early Xtrasweet, Florida Staysweet, Illini Chief Xtrasweet, Sucro, Extra Sweet 77, Party-time, Sweet-time, Dinner-time, Northern Sweet, Burpee Sugar Sweet, Candy Bar, Crisp 'N Sweet 710
3. Synergistic sweet, bi-sweet, Sweet-gene®	Bi-Color Synergistic, Honeycomb, Intrepid Synergistic, Sugar Loaf, Sugar time
4. Partial sugary enhanced, sugary enhanced, se, Ever-lasting Heritage, EH®	Earliglow EH, Golden Sweet EH, Iosweet EH, Kandy Korn EH, Mainliner EH, Seneca Sentry, Tendertreat EH, Snow Queen EH, White Lighting, Platinum Lady, Silver Prince, Paramount, Terrific
5. Partial sugary enhanced plus shrunken, se + sh	Symphony
6. Full sugary enhanced, se	Miracle, Remarkable, Double Treat, Double Delicious, Divinity
7. Combined gene, ADX	Pennfresh ADX

<sup>1</sup> Courter, J.W. and A.M. Rhodes. 1982. A classification of vegetable corns and new cultivars for 1982. Proceedings 1982 Illinois vegetable growers schools. Hort. Series 31, Univ. of IL, Urbana.

The authors acknowledge the help of John M. Gerber, Dept. of Horticulture, U. of Illinois in preparing this publication.



**TABLE 2. Isolation requirements of different types of sweet corn<sup>1</sup>.**  
Isolation requirement: Y = yes, N = no.

Sweet Corn	NEIGHBORING FIELD							
	Field, pop, flint corn	Standard sweet corn	Extra, super sweet	Synergistic sweet	Partial sugary enhanced	Partial se + sh	Full sugary enhanced	ADX
Standard sweet corn (sugary, su)	Y	-	Y	N	N	N	N	Y
Extra sweet <sup>2</sup> Super sweet (brittle, bt, shrunken, sh)	Y	Y	-	Y	Y	Y	Y	Y
Synergistic sweet (bi-sweet, Sweet-gene)	Y	N	Y	-	N	N	N	Y
Partial sugary enhanced (sugary enhanced, se, Everlasting Heritage, EH)	Y	N	Y	N	-	N	N	Y
Partial sugary enhanced plus shrunken (se + sh)	Y	Y	Y	N	N	-	N	Y
Full sugary enhanced (se)	Y	Y	Y	N	N	N	-	Y
Combined gene, ADX	Y	Y	Y	Y	Y	Y	Y	-

<sup>1</sup> Courter, J.W. and A.M. Rhodes. 1982. A classification of vegetable corns and new cultivars for 1982. Proceedings 1982 Illinois vegetable growers schools. Hort. Series 31, University of Illinois, Urbana.

<sup>2</sup> sh and bt types must also be separated from each other

### Scheduling of Planting and Harvest

Seed catalogues list days to maturity for sweet corn varieties. These values are useful for comparisons between varieties, but generally are not accurate enough for scheduling harvest. The actual number of days to harvest for a variety varies considerably, depending on the time of year planted, air and soil temperatures, sunlight, moisture during the growing season, and area where grown. Early varieties (60 to 65 days to maturity) often take 80 or more days to mature when planted in the spring. Corn planted after June 1 usually matures more closely to the listed maturity dates than that planted earlier.

Extensive work is being done at several institutions to develop a system for scheduling sweet corn plantings by use of corn heat units (CHU). Some seed companies now give CHU requirements for their varieties. Corn grows best at 86°F and does not grow when temperatures drop below 50°F. The daily CHU are calculated by adding the high and low temperatures for the day, dividing by 2, and subtracting 50. Thus  $CHU = \frac{T_{max} + T_{min}}{2} - 50$ . If the calculation gives a negative value, the CHU value is zero.

EXAMPLE 1. Daytime high temperature of 83°F, nighttime low of 52°F:  
 $CHU = \frac{83+52}{2} - 50 = 17.5$

EXAMPLE 2. Daytime high temperature of 61°F, nighttime low of 35°F:  
 $CHU = \frac{61+35}{2} - 50 = 0$

The average CHUs for a number of locations in Michigan are given in Table 3. These figures can be used to estimate when a variety will be ready, if its CHU requirements are known. The accumulated CHU for any date varies each year. Also, some early varieties appear to have variable CHU requirements depending on the year. Generally, early season varieties require 1,400-1,600 CHU, midseason varieties require 1,600-1,800, and full season varieties require over 1,800 CHU to reach maturity.

Sweet corn takes about 20 days to emerge from 50°F soils, but only about 5 days to emerge at 70°F. Most varieties reach market maturity 18 to 20 days after first silking. Seed catalogue maturity dates calculated from emergence usually give a good estimate of sweet corn harvest dates.

Plant early and mid-season varieties for harvest the first month of the harvest season, and full-season varieties for later pickings. Full-season varieties generally produce better quality corn and higher yields than do short season varieties planted later in the season.

A planting of a particular variety can usually be picked over a period of 5 to 7 days before it becomes overmature. May plantings of the same variety 10 days apart usually mature about 5 days apart in July and August. To maintain a constant supply of marketable corn, it is necessary to plant varieties with at least a 10% overlap of maturity dates as the season progresses.

### Climatic Requirements

Sweet corn is a warm season crop which requires 60 to 100 days from planting to market maturity. It



15,000 plants per acre for large, late varieties. About 10 to 12 lb. of seed are required per acre. Plant the seeds 1 to 2 inches deep in moist soil. Begin planting in early May and continue until mid June, on a weekly or biweekly basis. Plant varieties of all seasons (early, second early, midseason, late) early in the season to obtain continuous harvests. After June 1, plant only mid-season or late varieties, since they are better suited to production during August and September.

## Fertilization

Fertilizer and lime requirements should be determined by a complete soil test. Sweet corn grows best at pH 6.0 to 6.5 on mineral soils and 5.2 to 5.5 on muck soils. If lime is needed to raise the pH, it should be applied and worked into the soil the fall before planting.

A 400-crate per acre crop of sweet corn removes approximately 100 lb. nitrogen (N), 50 lb. phosphate (P<sub>2</sub>O<sub>5</sub>), and 50 lb. potash (K<sub>2</sub>O) per acre. To maintain adequate nutrient levels, apply about 120 lb. N, 80 lb. P<sub>2</sub>O<sub>5</sub>, and 80 lb. K<sub>2</sub>O per acre during the crop year. Apply some of the N and P<sub>2</sub>O<sub>5</sub> in a band at planting, 2 inches to the side and 2 inches below the seed. Up to 60 lb. N and all of the P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O may be applied in the band. Some of the P<sub>2</sub>O<sub>5</sub> and all of the K<sub>2</sub>O may be broadcast and plowed down. The rest of the N should be split between plowdown and sidedressing.

The following are possible combinations for applying fertilizer to sweet corn:

EXAMPLE 1: Plowdown 200 lb. 10-20-20; band at planting 200 lb. 20-20-20; sidedress with 130 lb. 45-0-0 when the sweet corn is 8 to 12 inches high.

EXAMPLE 2: Band at planting 400 lb. 10-20-20; sidedress with 180 lb. 45-0-0 when corn is 8 to 12 inches high.

EXAMPLE 3: Broadcast and plowdown 135 lb. 0-0-60 per acre; band at planting 175 lb. 18-46-0 per acre; sidedress with 200 lb. 45-0-0 per acre when corn is 8 to 12 inches high.

Nitrogen sidedressing about 1 month after planting (when corn is 8 to 12 inches high) is an important part of any fertilization program. Granular ammonium nitrate (33-0-0) or urea (45-0-0), or various liquid or gaseous forms of ammonia can be used for sidedressing. All of them, except ammonium nitrate, must be knifed, cultivated, or watered into the soil to avoid volatilization.

Sweet corn is responsive to manganese (Mn) and zinc (Zn), especially on soils with pH above 7.0. Copper may also be needed on organic soils. When needed, include micronutrients in the fertilizer at planting. (See Extension Bulletin E-486, "Secondary and Micronutrients for Vegetable and Field Crops.")

## Irrigation and Rainfall

Sweet corn has a shallow root system, with most roots in the upper 2 ft. of soil. It is most susceptible to moisture stress at silking and during kernel-filling. Hot, dry winds and lack of adequate soil



Fig. 1. Average date of last temperature of 32°F. or lower in the spring.

moisture can result in no ear formation or poorly-filled ears.

Sweet corn requires about 1 inch of water per week during the growing season and 1½ inches per week during ear-filling to maintain normal growth. Drought stress, as evidenced by slow progress and rolling of the leaves during the day, will result in delayed maturity. If rainfall is inadequate, irrigate to supply these required amounts.

## Harvest and Post Harvest

Sweet corn is ready for harvest when 70% or more of the primary ears are marketable. Visually, the silk is dry and ears are filled out. Check several ears in various parts of the field to ascertain maturity. For fresh market, it is usually wise to start harvest before all ears are ready and continue picking over 5 to 7 days. In this way, most of the corn can be harvested before it becomes overmature.

Sweet corn can be harvested by hand or by machine. With hand harvest, more than one picking may be required to get all marketable ears. Only large, full ears are picked the first time through, and the harvest is repeated 5 to 7 days later. Plants of several full-season varieties produce second, marketable ears that mature 5 to 7 days after the primary ears. These secondary ears may be harvested to fill gaps between scheduled harvests.

Hand harvest is generally accomplished by driving down 2 rows with a tractor and trailer (picking the rows ahead of the tractor) and picking 4 or more rows on each side of the trailer. The ears are picked into baskets and dumped into the trailer, or picked and thrown directly into the trailer.

Machines harvest once-over destructively, with no possibility of selective or multiple harvests. Virtually all sweet corn harvesters damage a few kernels at the butt of each ear. This is not a serious problem for processing corn, but may reduce qual-



ity for fresh market slightly, especially if corn is not marketed soon after harvest. Damage can be kept to a minimum by using varieties suited for machine harvest and adjusting machines and operating speeds to fit the varieties being harvested.

Sweet corn is usually packed 5 dozen in a bag or crate, or bagged in single dozens for retail sale. Some roadside markets set a load of corn under a roof and allow customers to select and bag their own.

Regular sweet corn loses its sweetness very soon after harvest if held at temperatures over 50°F. Approximately half the sugar is lost within 24 hours at 86°F. Extra- and super-sweet corns maintain sweetness longer, as a rule. If corn is sold retail the day of harvest, no precooling is needed. However, if the corn is to be shipped to market or held for an extended period of time, it should be cooled below 40°F as soon as possible.

Hydrocooling removes field heat very quickly. If 32°F water is used, the half-cooling time for ear corn in husks is 20 minutes. This means that half the difference between the water and corn temperature will be reached in 20 minutes. For example, if the corn is 82°F and the water is 32°F, the difference in temperature is 50°F, so the temperature will be reduced 25°, to 57°F, in 20 minutes. Another 20 minutes would reduce the temperature 12 degrees to 45°F. The half cooling time for crated corn is 28 minutes.

After cooling, store the corn in a cold room below 40°F. Optimum storage temperature is 32°F. If hydrocooling is not available, pick the corn early in the morning while it is still cool, soak with water, and ice. If placed in a cold room, stack so that air circulates to all boxes. If sweet corn is cooled soon after harvesting and stored at 32°F, good eating quality should be maintained for 1 week.

## Insects and Nematodes

**Nematodes:** Root-lesion, stunt, stubby-root, lance, and dagger nematodes can infest sweet corn. Crop rotation is the best means of avoiding nematode problems: If nematodes are suspected of being a problem, send soil samples to the MSU Nematode Diagnostic Laboratory to determine population densities. If nematodes have reached economic levels, treat with a nematicide at planting. (See Extension Bulletin E-312 "Control of Insects, Diseases and Nematodes on Commercial Vegetables," for nematode control recommendations.)

**Seed corn maggots:** Treat all sweet corn seed with an insecticide to avoid damage from maggots which attack the seed in the soil before it germinates. The insecticides may be applied as a slurry treatment before seeding or in the planter box. (See Extension Bulletin E-312 for all insect control recommendations.)

**Wireworms** are often a problem if corn is planted in old pastures or sod fields. The wireworms are thin, tan, hard worms with dark heads and six legs just behind the head. They eat the roots of young plants, causing wilting and then death. If planting

corn within 2 years of sod, use a soil insecticide to control wireworms. Insecticides used for rootworm control will aid in wireworm control.

**Western and Northern corn rootworms:** Corn rootworms may be a problem when corn is planted in the same field for 2 or more consecutive years. Crop rotation is the best control measure. Rootworm eggs hatch and the larvae eat corn roots in June and early July. Root damage to sweet corn is usually not too serious, since the ears are picked while the stalks are still green. Infestations in field corn cause lodging and thus loss due to inability to recover the ears. Applications of soil insecticides give adequate control.

Corn rootworm adults, called silk beetles, emerge from the soil in July and eat corn silk. The adult Western beetles are about ¼ inch long, yellow-to-reddish with three black stripes down their back. The adult Northern beetles are pale green or yellow with unmarked wings. Both can be distinguished from other beetles by their very long antennae. If the beetles attack sweet corn before pollination, kernel-set may be seriously reduced. Check fields for adult beetles when silk first appears. Pollination occurs 3 or 4 days after first silk appears, then silk wilts and dries. If beetles appear before pollination, they must be controlled with an insecticide. Insecticides applied for control of corn borers or earworms should also control adult rootworms. (See Extension Bulletin E-736, "Corn Rootworm.")

**Cutworms** can attack sweet corn anytime during the season. There are a number of species of various colors and feeding habits. However, most of them are night feeders that hide under the plants, debris, or soil during the day. Cutworms are especially a problem in weedy or trashy fields, such as minimum tillage fields. Most damage is done early in the season to young seedlings.

If cutworm damage occurs, the soil should be treated at the base of the plants.

**Fall armyworms** appear late in the season, about the same time as corn earworms. The worms are dark brown or black, 1 to 1¼ inches long, with an inverted Y on the front of the head. They usually eat in the whorl of the plant, but also enter the ears, either through the tip or the side. They are usually controlled by sprays for corn earworms.

**Corn flea beetles** feed on young corn plants early in the season. Heavy feeding can kill or stunt plants. Flea beetles also transmit Stewart's bacterial wilt, which is a problem in some areas, especially following mild winters. Spray for flea beetles as soon as damage is seen.

**Corn leaf aphids** are small, bluish-green insects that migrate into fields in June and rapidly increase in numbers. They leave a sticky substance, called honeydew, on the leaves and ears on which sooty mold develops. This makes the ears sticky and unsightly. The honeydew also attracts the adult corn earworms for egg-laying. Most insecticides applied for worm control also control leaf aphids.

**European corn borer** larvae are small, white worms, ½ to 1 inch long, with dark colored heads.



**TABLE 3. Corn heat units (CHU) based on Fahrenheit temperatures, for several locations in Michigan. Figures are based on 30 years of weather records (1931-1960).**

City	CHU ACCUMULATION							
	March	April	May	June	July	Aug	Sep	Oct
Adrian	15	106	423	1027	1777	2474	2911	3074
Alpena	3	34	180	562	1102	1597	1860	1944
Benton Harbor	16	97	361	901	1604	2267	2717	2904
Big Rapids	7	62	285	762	1385	1956	2276	2382
Caro	10	78	325	863	1534	2150	2525	2668
Chatham	1	25	140	465	957	1412	1639	1700
Cheboygan	1	26	153	530	1113	1650	1948	2036
Coldwater	16	109	404	969	1680	2341	2769	2940
East Jordan	5	50	239	673	1269	1821	2130	2233
East Lansing	10	79	321	831	1483	2086	2444	2575
Eau Claire	18	120	433	1026	1783	2498	2965	3159
Grand Haven	7	63	283	768	1427	2052	2450	2598
Greenville	11	86	355	896	1593	2235	2614	2751
Harbor Beach	4	45	216	639	1239	1820	2173	2285
Hart	7	63	276	758	1403	2001	2350	2473
Hastings	16	107	414	987	1702	2374	2802	2971
Holland	13	95	373	922	1629	2296	2729	2902
Houghton	1	22	129	419	896	1333	1534	1590
Iron Mountain	2	39	217	621	1176	1661	1906	1978
Ironwood	3	45	230	629	1201	1713	1969	2047
Jackson	15	100	387	940	1642	2298	2708	2865
Kalamazoo	17	117	435	1024	1759	2453	2906	3083
Lake City	4	44	218	631	1190	1701	1971	2050
Lapeer	10	80	334	853	1531	2154	2551	2697
Manistee	5	52	240	679	1296	1890	2251	2373
Milford	11	80	327	837	1504	2127	2505	2647
Monroe	13	102	410	1004	1753	2451	2919	3109
Mt. Clemens	8	72	326	868	1582	2246	2662	2818
Mt. Pleasant	8	74	330	855	1533	2155	2530	2660
Newberry	1	22	136	455	951	1407	1625	1679
Saginaw	9	72	311	830	1505	2123	2485	2611
Sault St. Marie	1	15	108	386	840	1280	1487	1533
Traverse City	6	50	218	653	1276	1863	2196	2306
West Branch	3	42	217	623	1165	1652	1897	1971

<sup>1</sup> VanDenBrink, C., N.D. Strommen, and A.L. Kenworthy. 1971. Growing degree days in Michigan. MSU Research Report 131.

requires a soil temperature of 50°F or higher for germination. Corn plants are injured by temperatures below 29°F, but may recover from frost damage if the growing points are still below ground level. Corn up to 10 inches high (6 leaves) will usually recover from frost, but taller corn will usually be killed.

Sweet corn can usually be planted safely about 2 weeks before the date of a 50% chance of frost in an area (See Figure 1). Sweet corn planted before May 1 may avoid frost, but will usually grow slowly because of cool soil and air temperatures. Corn planted 2 weeks or more later will often mature earlier than the first corn planted, because it has encountered better growing conditions without interruption and physiological chilling injury.

### Soil Requirements

Sweet corn grows well on any well drained soil. Sandy soils dry out and warm up early in the spring and are well suited for early plantings. Clays and loams hold more water and are better suited for production in August and September. Sweet corn grows well on muck soils, but late spring frost may injure corn in low areas.

### Spacing and Planting

Plant sweet corn in 30 to 40 inch rows: early varieties 8 to 10 inches apart and late varieties 10 to 12 inches apart in the rows. Seeding rates vary with seed and plant size: about 18,000 to 20,000 plants per acre for small, early varieties and 13,000 to



The adult moths are dull brown, about 1 inch across. The white egg masses are laid on undersides of leaves in an overlapping manner, resembling fish scales. European corn borers overwinter as larvae in corn stalks. Adult moths emerge in late May and lay eggs on corn plants. The eggs hatch and larvae emerge in about 4 days and begin feeding on the corn plants. Since feeding often begins in the whorl at the top of the plant, newly emerging leaves have a "shot hole" appearance, i.e. the leaves have many small holes in them. If tassels are present, some of them will tip over as a result of borer damage. The borers can enter ears through the butt end, through the side, or through the silk.

In Michigan, there are two generations of corn borers each year. The first generation usually appears the last week in May and peaks about June 10. The second generation usually appears the last week of July and peaks August 12 to 15. These dates vary somewhat depending on temperature. There is also some evidence that the generations are no longer distinct, and that some corn borers remain active between the two normal generations.

To control European corn borers, apply insecticides every 3 to 5 days after eggs begin to hatch. Use a high clearance sprayer so that the spray can be directed onto the whorl and the silk.

**Corn earworm** larvae are greenish-yellow with brown stripes and brown heads about 1 to 1¼ inches long and ¼ inch in diameter. The adult moths are dull brown, about 1 inch long. The earworm does not overwinter in Michigan. The adults migrate from the south, arriving in early August. Thus, earworms are a problem from mid-August until frost.

The adults are attracted to green silk, where they lay their eggs singly. The eggs hatch in 4 to 5 days and the larvae enter the tip of the ear. Some sweet corn varieties have extra long, tight husks, which gives some protection against earworm damage.

When adults appear, sweet corn should be sprayed on a 2 to 3 day schedule, directing the spray on to the silk.

**Sap beetles** are small black beetles, ¼ inch long with 4 yellow spots on their backs. They enter the ears through damage caused by other pests, such as birds, European corn borers, or corn earworms. They are secondary invaders and are only a problem if other pests are not controlled.

**NOTE ON HONEY BEES:** Honey bees collect pollen from corn fields during tasseling. To avoid killing bees, spray insecticides late in the evening or early in the morning when bees are not active. Sevin and PennCap-M are especially toxic to bees, and should not be applied to corn if bees are present.

**Birds** cause serious damage in many sweet corn fields. Gas exploding devices and electronic alarms are somewhat effective in scaring birds away. They should be moved every few days to keep the birds off guard. Shooting, in addition to the exploders, adds some effectiveness. Varieties with long, tight tip cover are somewhat resistant to bird damage.

## Diseases

**Stewart's bacterial wilt** (*Erwinia stewartii*) is sometimes a problem on young plants. It occurs most often after mild winters since its carrier, the corn flea beetle, is not killed off. Infected leaves have pale green to yellow streaks the length of the leaves, with wavy margins. The streaks turn brown and dry up soon. Dark brown cavities occur in the stalk near the soil line. Young, infected plants usually die. Older, infected plants are usually not productive. Control of flea beetles will control Stewart's wilt.

**Common rust** (*Puccinia sorghi*) may reduce sweet corn yields under ideal disease-producing conditions. Rust may reach problem levels under cool, humid conditions. The oval-to-elongate brown pustules are scattered over all parts of the plant, but are especially heavy on the leaves. The pustules rupture, exposing the brownish-red spores. Later in the season, the spores are black. Although rust may overwinter on weeds (*Oxalis* spp.), most infection is caused by spores blown in from southern states. Control measures are usually not needed, except during heavy infestations. (See Extension Bulletin E-312 for all disease control recommendations.)

**Smut** (*Ustilago maydis*) causes large, fleshy, gray or white galls on ears, tassels, leaves, and stems of corn. The galls turn black as the spores in them mature. Smut development is enhanced by warm, dry conditions and physical damage from insects, weather, or cultivation. No chemical control is recommended for smut. Crop rotation and use of resistant varieties will reduce damage. (See Extension Bulletin E-1510, "Common Smut and Rust of Corn.")

**Leaf blights** are common in corn fields but usually do not cause serious reductions in yield.

**Maize dwarf mosaic** is sometimes seen in southern areas of Michigan. It is transmitted by several types of aphids. Infected young plants are short with reduced internodes. Leaves have fine yellow and dark green lines. Older plants are stunted with yellowish leaves. Some commercial varieties are resistant to maize dwarf mosaic.

## Weed Control

Sweet corn growers have a wide choice of herbicides available for weed control. Many of the herbicides registered on field corn are also registered on sweet corn. Check herbicide labels before applying herbicides to sweet corn.

If sweet corn is included in rotation with other vegetable crops, do not use atrazine, since it may carryover and injure crops the following year. Always use caution and follow label recommendations when applying 2,4-D to sweet corn. Avoid drift to neighboring crops. Some sweet corn varieties may be injured by 2,4-D. (See Extension Bulletins E-433, "Weed Control Guide for Vegetable Crops," and NCR-94, "Herbicide Symptoms in Corn.")