2011 GROWTH STAGES - NW Michigan Horticultural Research Station

Traverse City, MI

Date	Time	Growing Degree Days - Base 42	Bartlett Pear	Potomac Pear	Mac	Gala	Red Delicious	Golden Delicious	Montmorency	Balaton	Hedelfingen	Gold	Napoleon	Chardonay	58.900.12 Plum	Apricot
4/4/11	10:00 AM	17	Dormant	Dormant	Dormant	Dormant	Dormant	Dormant	Dormant	Dormant	Dormant	Dormant	Dormant	Dormant	Dormant	Dormant
4/11/11	2:00 PM	57	Dormant	Dormant	Silver Tip	Silver Tip	Silver Tip	Silver Tip	Swollen Bud	Early Side Green	Bud Swell	Side Green	Side Green	Scale Crack	Early Bud Swell	Bud Swell
4/15/11	3:30 PM	74	Swollen Bud	Swollen Bud	Silver Tip	Silver Tip	Silver Tip	Silver Tip	Swollen Bud	Side Green	Ear. Side Green	Ear. Green Tip	Side Green	Scale Crack	Early Bud Swell	Ear. Bud Burst
4/22/11	1:00 PM	80	Swollen Bud	Swollen Bud	Silver Tip	Silver Tip	Silver Tip	Silver Tip	Ear. Side Green	Side Green	Side Green	Green Tip	Side Green	Scale Crack	Bud Swell	Bud Burst
4/25/11	4:00 PM	97	Swollen Bud	Swollen Bud	Silver Tip	Silver Tip	Silver Tip	Silver Tip	Ear. Side Green	Side Green	Side Green	Green Tip	Side Green	Scale Crack	Bud Swell	Bud Burst
4/29/11	4:00 PM	113	Swollen Bud	Swollen Bud	Ear. Green Tip	Ear. Green Tip	Ear. Green Tip	Ear. Green Tip	Side Green	Green Tip	Side Green	Green Tip	Green Tip	Scale Crack	Ear. Bud Burst	Bud Burst
5/2/11	4:00 PM	134	Bud Burst	Bud Burst	Late Green Tip	1/4" Green	1/4" Green	Green Tip	Green Tip	Late Green Tip	Green Tip	Late Green Tip	Late Green Tip	Scale Crack	Bud Burst	Bud Burst
5/6/11	4:30 PM	155	Late Bud Burst	Late Bud Burst	1/2 " Green	1/2 " Green	1/2 " Green	Green Tip	Early Bud Burst	Bud Burst	Bud Burst	Early Bud Burst	Bud Burst	Scale Crack	Ear. Green Cluster	Ear. Wht. Bud
5/9/11	4:00 PM	195	Green Cluster	Green Cluster	Tight Cluster	Tight Cluster	Tight Cluster	1/2 " Green	Bud Burst	Late Bud Burst	Ear. White Bud	Late Bud Burst	Ear. White Bud	Late Scale Crack	Green Cluster	First Bloom
5/11/11	3:00 PM	223	Late Green Cluster	Late Green Cluster	Tight Cluster	Tight Cluster	Tight Cluster	Ear. Tight Cluster	Bud Burst	Late Bud Burst	2% Bloom	Early White Bud	5% Bloom	Late Scale Crack	Early White Bud	80% Bloom
5/12/11	4:00 PM	245	Late Green Cluster	Late Green Cluster	Tight Cluster	Tight Cluster	Tight Cluster	Tight Cluster	Late Bud Burst	Early White Bud	60% Bloom	First Bloom	90% Bloom	Early Bud Swell	White Bud	Early Petal Fall
5/16/11	1:00 PM	275	Early White Bud	White Bud	Early Pink	Early Pink	Pink	Pink	10% Bloom	50% Bloom	Full Bloom	80% Bloom	Full Bloom	Early Bud Swell	First Bloom	Late Petal Fall
5/20/11	3:00 PM	335	90% Bloom	90% Bloom	Late Pink	Pink	Early Open Cluster	Late Pink	95% Bloom	Full Bloom	Early Petal Fall	Full Bloom	Early Petal Fall	Early Bud Swell	Full Bloom	In Shuck
5/23/11	4:00 PM	410	Petal Fall	Petal Fall	75% Bloom	75% Bloom	85% Bloom	King Bloom	Petal Fall	Petal Fall	Shuck Split	Late Petal Fall	Shuck Split	1 - 3" Shoots	Late Petal Fall	Shuck Split
5/27/11	4:00 PM	445	Petal Fall	Petal Fall	Full Bloom	Full Bloom	Early Petal Fall	50% Bloom	Petal Fall	Late Petal Fall	6 mm Fruit	Shuck Split	6 mm Fruit	1 - 3" Shoots	Late Petal Fall	8 mm Fruit
5/31/11	8:30 AM	505	7.5 mm Fruit	8 mm Fruit	Petal Fall	Petal Fall	Petal Fall	Full Bloom	In The Shuck	In The Shuck	8.5 mm Fruit	8.5 mm Fruit	9 mm Fruit	1 - 3" Shoots	In The Shuck	13 mm Fruit
6/6/11	4:00 PM	671	10.5 mm Fruit	14 mm Fruit	9 mm Fruit	8 mm Fruit	8 mm Fruit	Late Petal Fall	7 mm Fruit	9 mm Fruit	9.5 mm Fruit	10 mm Fruit	10.5 mm Fruit	1 - 3" Shoots	Late Shuck Split	16.5 mm Fruit
6/13/11	4:00 PM	803	14.5 mm Fruit	17 mm Fruit	19 mm Fruit	13.5 mm Fruit	15 mm Fruit	13 mm Fruit	11.5 mm Fruit	11 mm Fruit	11 mm Fruit	11.5 mm Fruit	13 mm Fruit	10 - 16" Shoots	11 mm Fruit	24 mm Fruit
6/21/11	8:00 AM	977	19 mm Fruit	24 mm Fruit	29 mm Fruit	21 mm Fruit	24.5 mm Fruit	21 mm Fruit	12.5 mm Fruit	12 mm Fruit	13.5 mm Fruit	13 mm Fruit	15.5 mm Fruit	10 - 16" Shoots	18 mm Fruit	26 mm Fruit
6/27/11	4:00 PM	1138	21.5 mm Fruit	28 mm Fruit	36.5 mm Fruit	26.5 mm Fruit	31 mm Fruit	27 mm Fruit	14 mm Fruit	13 mm Fruit	15 mm Fruit	14.5 mm Fruit	18 mm Fruit	10 - 16" Prebloom	20 mm Fruit	27.5 mm Fruit
7/5/11	2:00 PM	1345	25 mm Fruit	32 mm Fruit	40 mm Fruit	32 mm Fruit	37 mm Fruit	32 mm Fruit	18 mm Fruit	15 mm Fruit	19 mm Fruit	18 mm Fruit	21 mm Fruit	Bloom	22 mm Fruit	31 mm Fruit
7/11/11	1:00 PM	1535	26 mm Fruit	32 mm Fruit	45 mm Fruit	33 mm Fruit	41 mm Fruit	34 mm Fruit	18 mm Fruit	15 mm Fruit	19 mm Fruit	19 mm Fruit	22 mm Fruit	Late Bloom	22 mm Fruit	31 mm Fruit
7/18/11	4:00 PM	1755	29 mm Fruit	37 mm Fruit	48 mm Fruit	36 mm Fruit	45 mm Fruit	38 mm Fruit	19 mm Fruit	16 mm Fruit	Harvested	Harvested	Harvested	Buckshot Berries	23 mm Fruit	33 mm Fruit
7/25/11	9:00 AM	1992	34 mm Fruit	42 mm Fruit	52 mm Fruit	40 mm Fruit	48 mm Fruit	43 mm Fruit	Harvested	18 mm Fruit	--	--	--	Berry Touch	23 mm Fruit	Harvest of Ear. Vars.
8/1/11	1:00 PM	2218	39 mm Fruit	46 mm Fruit	56 mm Fruit	44 mm Fruit	53 mm Fruit	45 mm Fruit	--	Harvested	--	--	--	Green Fruit	25 mm Fruit	Harvested
8/8/11	1:30 PM	2445	40 mm Fruit	50 mm Fruit	59 mm Fruit	46 mm Fruit	55 mm Fruit	47 mm Fruit	--	--	--	--	--	Green Fruit	28 mm Fruit	--
8/16/11	9:00 AM	2653	43 mm Fruit	53 mm Fruit	59 mm Fruit	48 mm Fruit	59 mm Fruit	49 mm Fruit	--	--	--	--	--	Green Fruit	29 mm Fruit	--
8/22/11	10:00 AM	2820	46 mm Fruit	59 mm Fruit	59 mm Fruit	52 mm Fruit	62 mm Fruit	53 mm Fruit	--	--	--	--	--	Veraison	33 mm Fruit	--
8/29/11	1:00 PM	3000	49 mm Fruit	63 mm Fruit	59 mm Fruit	55 mm Fruit	65 mm Fruit	55 mm Fruit	--	--	--	--	--	Veraison	34 mm Fruit	--
9/7/11	1:30 PM	3222	51 mm Fruit	64 mm Fruit	59 mm Fruit	56 mm Fruit	67 mm Fruit	55 mm Fruit	--	--	--	--	--	Veraison	36 mm Fruit	--
9/12/11	4:00 PM	3355	51 mm Fruit	66 mm Fruit	60 mm Fruit	56 mm Fruit	69 mm Fruit	56 mm Fruit	--	--	--	--	--	Veraison	Harvested	--
9/26/11	4:30 PM	3560	Harvested	70 mm Fruit	Harvested	58 mm Fruit	75 mm Fruit	56 mm Fruit	--	--	--	--	--	Colored Fruit	--	--