

Reality Research Data for MAIA-SM



Variety Qualities

Freeze Damage Sensitivity: Moderate severity (Similar to Gala)

Bloom Timing: Early / Mid

Fire Blight: Moderate severity (Similar to Gala)

Fruit Drop: Not prone to drop

Tree Growth Habits: Low-moderate growth, pendent limbs. Once trees start yielding a crop, growth can shut down similar to Honeycrisp, blind wood tendencies

Fruit Qualities

Harvest Timing: Early Season (1-2 weeks before Gala)

Fruit Flavor/Texture: Very Sweet / Dense

Fruit Firmness: Approximately 17-20 lbs.

Brix (% Fruit Sugar Content): Approximately 14.5%-18%

Starch Pattern Index (SPI): 6-8 (Cornell 1-8 Starch chart). Holds flavor better at 6-7 Starch

Bitter Pit/Lenticle Break down: Not observed at harvest, potential minor lenticel breakdown in storage

Moldy Core: Not observed at this point

Water Core: Moderate severity, seems to dissipate fairly rapidly in common storage

Bitter Rot: Has been found in storage

Russet: Moderate severity due to freeze damage (Similar to Gala)

Storage: Short term storage life, due to maintaining varietal flavor (3 Months)

Fruit Thinning Comments

1: MAIA-SM (Sweet Maia®), tends to set a heavy crop. They need to be thinned moderately aggressive.

2: If trees are over cropped, it will lead to poor fruit size, reduced color, & reduced sugar levels.

3: Biennial bearing has not been noticed, even with over cropping issues (on Bud 9 rootstock).

4: Hand thinning is recommended if chemical thinning does not provide adequate thinning.

2025 Fruit Thinning Trial, Conducted in Lyons, NY, Reality Research LLC.

Thinning Weather Conditions: Max Temp 83°F, Min Temp 57°F, Solar Radiation 21.7, Thinning Index -39.99

Rootstock: Bud 9

Tree Age: 7 Years

Growth Stage: 5-6mm Fruit Size

Thinning Date: 5/16/2025



	Untreated Check	NAA 4 fl oz/a Carbaryl 32 fl oz/a	Maxcel 64 fl oz/a Carbaryl 32 fl oz/a	Brevis 1.5 pt/a Regulaid 2 pt/500 Gal	Brevis 2 pt/a Regulaid 2 pt/500 Gal
% Increased Fruit Thinning:		-1.06	22.04	18.85	35.75
Percent fruited Clusters:	56.58	57.19	44.11	45.91	36.35
% Fruit (Top) Position of Tree	40.44	38.09	24.09	23.39	20.97
% Fruit (Mid) Position of Tree	34.10	33.85	42.28	35.69	29.95
% Fruit (Lower) Position of Tree	25.46	28.06	33.63	40.92	49.08
%, 1 Fruited Clusters:	38.56	49.89	66.82	50.82	56.52
%, 2 Fruited Clusters:	30.39	31.05	21.36	32.36	32.69
%, 3 Fruited Clusters:	23.93	15.98	8.55	14.20	9.27
%, 4 Fruited Clusters:	5.79	3.08	3.28	2.62	1.52
%, 5 Fruited Clusters:	1.33	0.00	0.00	0.00	0.00