

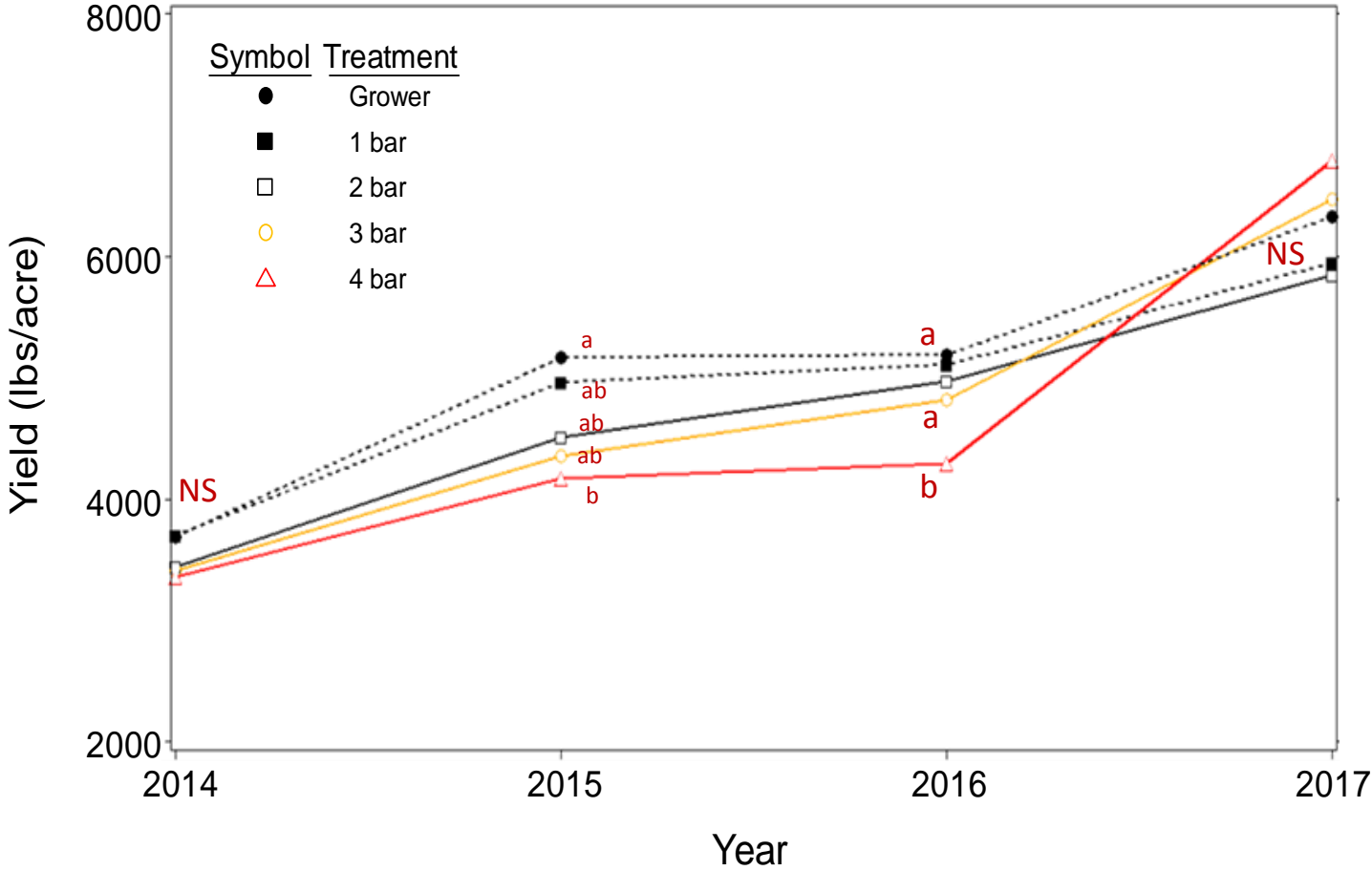
2017 Season Update

Effect of early season SWP irrigation thresholds on canopy light interception.

SWP just before the first irrigation (bars below baseline)	Approximate Irrigation Start Date	Percent Canopy Light Interception (PAR)			
		2014	2015	2016	2017
Grower Practice At or near Baseline (0)	Late April to mid May	84	89.3	87.5	83.5
1	Mid to Late May	86	88.8	87.0	87.9
2	Early to Mid June	88	90.8	87.8	88.7
3	Mid to Late June	85	89.1	86.3	86.7
4	Late June to Early July	88	89.9	89.0	88.1

No significant differences in canopy light interception across early season irrigation treatments all four seasons.

Four-year yield trends



Effect of early season water stress on Chandler walnut quality. Values are averages over three years (2014-16).

SWP just before the first irrigation (bars below baseline)	Approximate Irrigation Start Date	Nut Weight (grams)	Percent Large Sound	Percent Jumbo and Large	RLI	Percent Mold	Percent Shrivel	Percent Edible Kernel
At or near Baseline (0)	Late April to mid May	10.4 a ¹	79.1 a	77.4 a	54.5	1.3	2.3	45.5
1	Mid to Late May	10.1 ab	75.7 ab	73.5 ab	55.1	1.3	2.6	45.7
2	Early to Mid June	10.1 ab	75.6 ab	73.5 ab	55.0	1.6	1.8	45.4
3	Mid to Late June	9.7 bc	68.3 bc	66.7 bc	54.4	1.8	2.5	45.8
4	Late June to Early July	9.3 c	57.7 c	57.7 c	54.7	1.6	2.7	46.1

¹ Different **red** letter designations behind values indicate statistically different quality responses to irrigation start date and early season crop water stress.

Effect of early season water stress on Chandler walnut quality in 2017.

SWP just before the first irrigation (bars below baseline)	Approximate Irrigation Start Date	Nut Weight (grams)	Percent Large Sound	Percent Jumbo and Large	RLI	Percent Mold	Percent Shivel	Percent Edible Kernel
At or near Baseline (0)	Mid May	9.5	76.0	71.0	56.0	1.1	3.6	47.2
1	Late May	9.2	71.0	65.0	55.8	1.3	2.8	47.3
2	Early to Mid June	9.3	73.0	69.0	56.2	2.1	3.2	46.4
3	Mid to Late June	8.9	67.0	63.0	55.4	2.0	2.7	48.2
4	Late June to Early July	9.0	71.0	66.0	55.4	2.0	3.3	47.3

¹ There were no statistically different walnut quality responses to irrigation start date and early season water stress in 2017.