YIELD AND FRUIT QUALITY RESULTS FROM CANOPY – CROP LOAD STUDY: PLUM 'ANGELENO'

Table 4 presents production results (yield, fruit quality) for plum 'Angeleno' under crop load treatments (high, medium, low) for Vase and Tatura Trellis canopy systems for six consecutive seasons: 2016/17, 2017/18, 2018/19, 2019/20, 2020/21 and 2021/22, respectively at Tatura, Victoria, Australia.

Table 4. Production parameters in response to crop load treatments (Low, Medium, High) of 'Angeleno' plum under two canopy architectures (Tatura Trellis, Vase) during seasons 2016/17, 2017/18, 2018/19, 2019/20, 2020/21 and 2021/22 (season 1 – 6).

Crop load	Fruit number (#/tree)	Fruit weight (g)	Yield (kg/tree)	Sweetness (°Brix)	Maturity (I_{AD})	Firmness (kgf)	Skin colour (% red)	Premium grade (%)
Season 1: Vase								
Low	53	80 b	4.2	17.2	1.3	3.0	10	71
Medium	75	78 b	5.9	17.5	1.3	3.0	11	65
High	93	73 a	6.8	17.3	1.3	3.0	13	60
ANOVA	ns	*	ns	ns	ns	ns	ns	ns
Season 1: Tatura Trellis								
Low	177 a	66 b	11.7 c	18.8	1.1 b	3.0 b	8 a	38 c
Medium	260 b	62 b	16.1 b	18.4	1.1 b	3.1 ab	10 a	26 b
High	423 c	51 a	21.6 a	18.2	1.2 a	3.0 a	17 b	10 a
ANOVA	***	***	***	ns	*	*	***	***
Season 2: Vase								
Low	61 a	71	4.2 a	19.6	1.3	4.7	4	53
Medium	79 b	72	5.6 b	19.6	1.3	4.8	4	55
High	108 c	70	7.4 c	19.3	1.3	4.7	4	51
ANOVA	***	ns	***	ns	ns	ns	ns	ns
Season 2: Tatura Trellis								
Low	146 a	69 b	9.8 a	21.1 b	1.1 b	4.0 c	5 ab	45 b
Medium	160 a	71 b	11.2 a	21.0 b	1.1 b	3.8 b	4 a	50 b
High	267 b	65 a	16.6 b	20.6 a	1.1 a	3.7 a	5 b	33 a
ANOVA	***	***	***	***	*	***	*	***
Season 3: Vase								
Low	107 a	56	6.0 a	21.3 b	1.4	3.7 b	13 a	4 a
Medium	177 b	56	9.9 b	20.9 b	1.4	3.6 b	13 a	6 ab
High	288 c	53	15.2 c	20.2 a	1.4	3.4 a	16 b	9 b
ANOVA	***	ns	***	***	ns	***	*	**
Season 3: Tatura Trellis								
Low	146 a	42 b	6.1 a	21.8 c	1.5 a	3.8 c	22 a	1
Medium	186 b	41 b	7.6 b	21.5 b	1.5 b	3.7 b	23 a	1
High	302 c	37 a	11.1 c	21.0 a	1.5 b	3.5 a	29 b	1
ANOVA	***	***	***	***	**	***	*	ns
Season 4: Vase								
Low	87 a	66	5.7 a	19.1 b	1.2 b	3.1	4 a	0
Medium	138 b	65	8.8 b	18.8 a	1.1 a	3.1	5 b	0
High	127 b	65	8.1 b	18.7 a	1.1 a	3.1	4 ab	0
ANOVA	***	ns	***	*	***	ns	*	ns
Season 4: Tatura Trellis								

Low	96	50	4.8	21.1 b	1.1 b	3.6	10 b	0
Medium	100	51	5.0	21.1 b	1.1 b	3.6	10 b	0
High	102	51	5.1	20.8 a	1.1 a	3.5	8 a	0
ANOVA	ns	ns	ns	***	***	ns	***	ns
Season 5: Vase								
Low	73 a	76	5.5	21.7	0.9	3.6	7	62
Medium	99 ab	75	7.4	21.4	0.9	3.6	6	62
High	111 b	75	8.1	21.4	0.9	3.6	5	61
ANOVA	*	ns	ns	ns	ns	ns	ns	ns
Season 5: Tatura Trellis								
Low	231 a	61 b	13.9 a	22.2 b	1.0 a	3.6 b	16	26 b
Medium	181 a	63 b	11.2 a	22.4 b	1.0 a	3.7 b	17	31 b
High	528 b	49 a	25.3 b	21.4 a	1.1 b	3.4 a	16	7 a
ANOVA	***	***	***	**	***	***	ns	***
Season 6: Vase								
Low	265	69.8	18.3	18.7	1.2	2.8	10	0
Medium	327	65.0	20.8	18.2	1.2	2.7	12	0
High	306	66.9	20.4	18.4	1.2	2.8	11	0
ANOVA	ns	ns	ns	ns	ns	ns	ns	ns
Season 6: Tatura Trellis								
Low	379	60.7	22.5	19.0	1.1 b	2.8	14	0
Medium	364	61.4	22.0	19.1	1.1 b	2.9	13	0
High	360	60.7	21.5	19.5	1.1 a	3.0	15	0
ANOVA	ns	ns	ns	ns	**	ns	ns	ns

ns, *, ** and *** indicate non-significant or significant differences at $P < 0.05$, 0.01 or 0.001, respectively, for the two-way interaction crop load treatments.