

## YIELD AND FRUIT QUALITY RESULTS FROM CANOPY – CROP LOAD STUDY: PEACH ‘AUGUST FLAME’

Table 2 presents production results (yield, fruit quality) for peach ‘August Flame’ under crop load treatments (high, medium, low) for Vertical Leader and Tatura Trellis canopy systems for 7 consecutive seasons: 2015/16, 2016/17, 2017/18, 2018/19, 2019/20, 2020/21 and 2021/22, respectively at Tatura, Victoria, Australia.

Table 2. Production parameters in response to crop load treatments (Low, Medium, High) of ‘August Flame’ peach under two canopy architectures (Tatura Trellis, Vertical Leader) during seasons 2015/16, 2016/17, 2017/18, 2018/19, 2019/20, 2020/21 and 2021/22 (season 1 – 7).

Crop load	Fruit number (#/tree)	Fruit weight (g)	Yield (kg/tree)	Sweetness (°Brix)	Maturity (I <sub>AD</sub> )	Firmness (kgf)	Skin colour (% red)
<i>Season 1: Vertical Leader</i>							
Low	46 a	134 c	6.2 a	16.6 b	0.9 a	5.4 a	83
Medium	58 a	122 b	7.1 a	16.3 ab	0.8 a	5.5 ab	85
High	175 b	82 a	14.1 b	16.0 a	1.1 b	5.8 b	82
ANOVA	***	***	***	**	***	**	ns
<i>Season 1: Tatura Trellis</i>							
Low	30 a	130 b	4.0 a	16.9 b	0.7 ab	5.4	88 c
Medium	54 b	131 b	7.1 b	17.2 b	0.7 a	5.6	83 a
High	115 c	106 a	11.7 c	16.1 a	0.8 b	5.5	86 b
ANOVA	***	***	***	***	**	ns	***
<i>Season 2: Vertical Leader</i>							
Low	41 a	195 c	8.0 a	14.0 b	1.0 a	6.6	15
Medium	61 a	163 b	9.9 ab	13.7 ab	1.1 b	6.8	16
High	88 b	138 a	12.1 b	13.3 a	1.1 b	6.6	17
ANOVA	**	***	*	*	*	ns	ns
<i>Season 2: Tatura Trellis</i>							
Low	72 a	168 b	9.1 a	14.8 b	0.9	6.2	16
Medium	108 b	142 a	13.7 b	14.4 b	1.0	6.4	18
High	122 b	133 a	13.0 b	13.5 a	1.1	6.4	19
ANOVA	*	***	*	**	ns	ns	ns
<i>Season 3: Vertical Leader</i>							
Low	40 a	192 c	7.7 a	17.0 b	1.2 a	7.5	38
Medium	60 b	167 b	10.0 b	16.9 a	1.2 b	7.5	41
High	88 c	144 a	12.4 c	16.9 a	1.2 b	7.5	41
ANOVA	***	***	***	***	***	ns	ns
<i>Season 3: Tatura Trellis</i>							
Low	63 a	142 c	8.9 a	16.9	1.2	7.5	34
Medium	87 b	134 b	11.6 b	16.9	1.2	7.5	37
High	110 c	118 a	12.8 b	16.9	1.2	7.5	37
ANOVA	***	***	***	ns	ns	ns	ns
<i>Season 4: Vertical Leader</i>							
Low	64 a	118 c	7.5 a	15.9 c	1.8 a	8.8 c	26 a
Medium	121 b	96 b	11.6 b	15.5 b	1.8 ab	8.6 b	29 b

High	181 c	79 a	13.8 c	14.8 a	1.9 a	8.3 a	34 c
ANOVA	***	***	***	***	**	***	***
<i>Season 4: Tatura Trellis</i>							
Low	33 a	119 c	3.8 a	17.8 c	1.3 a	7.9	27 a
Medium	64 a	96 b	6.0 b	16.7 b	1.5 b	7.9	31 b
High	117 b	69 a	7.9 c	15.6 a	1.6 c	7.8	36 c
ANOVA	***	***	***	***	***	ns	***
<i>Season 5: Vertical Leader</i>							
Low	93 a	142 b	12.9 a	14.8 b	1.3 a	6.9 b	65
Medium	86 a	139 b	12.0 a	14.9 b	1.3 a	6.9 b	63
High	213 b	91 a	19.1 b	13.7 a	1.5 b	6.5 a	63
ANOVA	***	***	***	***	***	***	ns
<i>Season 5: Tatura Trellis</i>							
Low	56 a	136 b	7.5 a	15.2 b	0.8 a	5.0 b	64
Medium	59 a	137 b	7.9 a	15.1 b	0.8 a	5.0 b	66
High	95 b	104 a	9.7 b	14.1 a	1.0 b	4.8 a	65
ANOVA	***	***	***	***	***	**	ns
<i>Season 6: Vertical Leader</i>							
Low	30 a	176 b	5.3 a	15.1 b	1.5 a	7.8 b	28 b
Medium	27 a	171 b	4.7 a	15.5 b	1.4 a	7.9 b	28 b
High	132 b	123 a	15.8 b	13.7 a	1.7 b	7.5 a	25 a
ANOVA	***	***	***	***	***	***	*
<i>Season 6: Tatura Trellis</i>							
Low	61 a	172 b	10.5 a	15.7 b	1.1	6.9 c	33
Medium	72 a	168 b	12.0 a	15.4 b	1.1	6.6 b	34
High	109 b	141 a	15.3 b	14.6 a	1.2	6.3 a	37
ANOVA	***	***	**	**	ns	***	ns
<i>Season 7: Vertical Leader</i>							
Low	45 a	183 c	8.2 a	13.5	1.4 a	6.3	64 b
Medium	91 b	146 b	12.5 b	13.4	1.5 b	6.3	67 b
High	212 c	94 a	19.8 c	13.1	1.6 c	6.5	60 a
ANOVA	***	***	***	ns	***	ns	*
<i>Season 7: Tatura Trellis</i>							
Low	69 a	183 c	12.6 a	14.7 b	1.1 a	6.0	69 b
Medium	142 b	141 b	19.9 b	14.5 b	1.3. b	6.2	70 b
High	283 c	90 a	25.5 c	13.7 a	1.5 c	6.3	64 a
ANOVA	***	***	**	***	***	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.