



WATER BUDGET CALCULATOR

Crop: **Table Grape - Crimson**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Monthly Evaporation (mm)	316	297	242	150	93	66	65	81	108	189	221	279
Average Daily Evaporation (mm)	10.2	10.6	7.8	5.0	3.0	2.2	2.1	2.6	3.6	6.1	7.4	9.0
Average (mean) Rainfall (mm/month)	8.9	14.8	16.2	41.7	100.7	164.4	159.3	118.0	72.0	44.8	26.1	10.3
Aver. Rainfall - Decile 1 (mm/month)	0.0	0.0	0.6	5.4	38.7	79.0	85.4	61.6	34.8	18.4	5.3	0.2
Effective Rainfall Fraction	0.7											
Effective Rainfall - Average Year (mm)	6.2	10.4	11.3	29.2	70.5	115.1	111.5	82.6	50.4	31.4	18.3	7.2
Effective Rainfall - Decile 1 Year (mm)	0.0	0.0	0.4	3.8	27.1	55.3	59.8	43.1	24.4	12.9	3.7	0.1

CROP WATER REQUIREMENT & IRRIGATION SUMMARY

Crop Factor	0.44	0.44	0.44	0.33	0.00	0.00	0.00	0.00	0.11	0.16	0.27	0.33
Crop Water Requirement (mm/month)	139.1	130.7	106.4	49.5	0.0	0.0	0.0	0.0	11.9	30.2	59.7	92.1
Water Deficit												
<i>Average Rainfall Month (mm)</i>	132.9	120.3	95.1	20.3	0	0	0	0	0	0	41.4	84.9
<i>Decile 1 Rainfall Month (mm)</i>	139.1	130.7	106.0	45.7	0	0	0	0	0	17.4	56.0	91.9
Irrigation Requirement												
<i>Average Rainfall Month (kL)</i>	1627	1473	1164	249	0	0	0	0	0	0	507	1039
<i>Decile 1 Rainfall Month (kL)</i>	1704	1600	1298	560	0	0	0	0	0	213	685	1126

Average Annual Evaporation **2107 mm**
 Average Annual Rainfall **777 mm**
 Annual Crop Water Requirement **620 mm**

Current Crop Allocation (kL/ha/yr) **5,000**
 Crop Area or Property size (ha) **1.225**
 Licensed Allocation (kL/yr) **6,123**
 System Efficiency (DU₂₅%) **0.79**

ALLOCATION SUMMARY

Theoretical Irrigation Requirement

<i>Average Rainfall Year</i>	6,059	kL/yr
<i>Decile 1 Rainfall Year</i>	7,185	kL/yr

Calculated Crop Allocation (DU% Adjusted)

<i>Average Rainfall Year</i>	7,670	kL/yr
<i>Decile 1 Rainfall Year</i>	9,095	kL/yr

Potential Crop Area - Current Allocation (DU% Adjusted)

<i>Average Rainfall Year</i>	1.0	ha
<i>Decile 1 Rainfall Year</i>	0.8	ha

Additional Comments: Irrigation Requirement (mm) = Crop Water Requirement - Effective Rainfall (avg year). Irrigation Requirement (kL) = Water Deficit (average) X Crop Area (ha) x 10,000 ÷ 1000.