

Annexure D: Avocado water requirements

The table below outlines the water requirements for avocados, representing the total amount of water needed for optimal growth. This requirement can be met through natural rainfall, supplemented by irrigation if necessary, to ensure the plants receive adequate hydration throughout their growth cycle.

Month (from flowering)	Phenology	ET (Levubu, Hoffman 1995) mm / tree / day related to typical phenology)	Crop factor (0.3-0.7) depending on phenology	mm water / day / tree	L / m ² / day	Water requirement per 3m radius tree (L / 3m radius / day)	Water requirement (m ³ / hectare / month)
1	100% Flower	2,35	0,70	1,65	1,65	46,51	610
2	Flower drop and fruit set	2,75	0,70	1,93	1,93	54,43	800
3	First (spring) vegetative flush / Fruit drop	3,50	0,70	2,45	2,45	69,27	1150
4	Fruit growth	4,25	0,60	2,55	2,55	72,10	1350
5	Fruit growth	4,60	0,60	2,76	2,76	78,04	1400
6	Fruit growth	4,50	0,60	2,70	2,70	76,34	1300
7	Second (spring) vegetative flush / Fruit maturing	2,50	0,50	1,25	1,25	35,34	800
8	Second (spring) vegetative flush / Fruit maturing	2,00	0,50	1,00	1,00	28,27	600
9	Fruit maturing	1,50	0,40	0,60	0,60	16,96	480
10	Fruit maturing / Harvest	1,25	0,40	0,50	0,50	14,14	380
11	Harvest	1,25	0,30	0,38	0,38	10,60	390
12	Tree rest	1,60	0,30	0,48	0,48	13,57	500
AVERAGE		2,67	0,53	1,52	1,52	42,96	

Total water requirement per hectare per year

9760