

Forest Nursery Irrigation Water Standards

C. B. Davey

Water property	Units	Low	Usable range	
			Good	High
Acidity	pH	4.5	5.5	7.2
Electrical conductivity (EC)	mmho/cm μ mho/cm	0.05 50	0.15 150	0.40 400
Sodium Absorption Ratio (SAR)*	$\frac{\text{Na}}{\sqrt{\text{Ca} + \text{Mg}/2}}$	0.1	1.0	2.0
Water classification	EC and SAR	C1S1	C1S1	C2S1
NO ₃	ppm	0.01	1.0	10
SO ₄	ppm	0.1	1.0	12
B	ppm	0.03	0.1	0.8
Ca	ppm meq/L	1 0.05	20 1	80 4
Mg	ppm meq/L	0.12 0.01	5 0.4	12 1
K	ppm meq/L	0.4 0.01	4 0.1	10 0.25
Na	ppm meq/L	0 0	10 0.45	25 1
CO ₃	meq/L	0	0.06	0.2
HCO ₃	meq/L ppm	0 0	1.0 60	2.6 160
Residual Na ₂ CO ₃ * (HCO ₃ +CO ₃)-(Ca+Mg)		0	0.7	1.25

* Na, Ca, Mg, HCO₃, and CO₃ all expressed in meq/L.