

Hydrology Effects of Trees by Species

Location: Hagatna, Guam, Guam, United States of America

Project: Micronesia , Series: simulation, Year: 2020

Generated: 4/16/2020



Species Name	Number of Trees	Leaf Area (ha)	Potential Evapotranspiration (m ³ /yr)	Evaporation (m ³ /yr)	Transpiration (m ³ /yr)	Water Intercepted (m ³ /yr)	Avoided Runoff (m ³ /yr)	Avoided Runoff Value (\$/yr)
Myristica	1	0.03	34.20	21.89	8.13	21.90	4.94	11.67
Artocarpus altilis	1	0.03	32.32	20.68	7.69	20.70	4.67	11.02
Adenanthera pavonina	1	0.02	22.39	14.33	5.32	14.34	3.24	7.64
Terminalia kaernbachii	1	0.02	21.42	13.71	5.09	13.72	3.10	7.31
Metroxylon amicarum	1	0.02	15.62	10.00	3.71	10.00	2.26	5.33
Fagraea berteriana	1	0.01	14.67	9.39	3.49	9.39	2.12	5.00
Citrus aurantifolia	1	0.01	14.40	9.22	3.43	9.22	2.08	4.91
Pandanus	1	0.01	9.28	5.94	2.21	5.95	1.34	3.17
Cocos nucifera	1	0.01	8.64	5.53	2.05	5.53	1.25	2.95
Cinnamomum	1	0.01	6.94	4.44	1.65	4.44	1.00	2.37
Annona muricata	1	0.01	5.39	3.45	1.28	3.45	0.78	1.84
Morinda citrifolia	1	0.01	5.25	3.36	1.25	3.36	0.76	1.79
Bambusa	1	0.01	5.25	3.36	1.25	3.36	0.76	1.79
Inocarpus fagifer	1	0.00	4.89	3.13	1.16	3.13	0.71	1.67
Areca catechu	1	0.00	4.30	2.75	1.02	2.75	0.62	1.47
Parinari	1	0.00	3.83	2.45	0.91	2.45	0.55	1.31
Piper methysticum	1	0.00	3.71	2.38	0.88	2.38	0.54	1.27
Mangifera indica	1	0.00	3.30	2.11	0.79	2.12	0.48	1.13
Carica papaya	1	0.00	2.60	1.66	0.62	1.67	0.38	0.89
Psidium guajava	1	0.00	2.00	1.28	0.47	1.28	0.29	0.68
Total	20	0.22	220.39	141.04	52.42	141.15	31.85	75.18

Avoided runoff value is calculated by the price \$2.361/m³. The user-designated weather station reported 572.7 centimeters of total annual precipitation. Eco will always use the hourly measurements that have the greatest total rainfall or user-submitted rainfall if provided.