

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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TEMERLOH (MALAYSIA)

Altitude: 50 m.

Latitude: 3° 27'N Longitude: 102° 26'E

Temperature observation period.: 1984-1994 (11)

Rainfall observation period....: 1964-1994 (31)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	25.56	29.44	21.67	32.78	17.78	198.1	118.15
Feb.	26.39	31.11	21.67	35.00	18.89	99.1	122.11
Mar.	27.22	32.22	22.22	35.56	19.44	152.4	145.50
Apr.	27.78	32.78	22.78	36.11	20.56	193.0	147.20
May.	27.78	32.78	22.78	35.56	20.00	167.6	153.03
Jun.	27.50	32.22	22.78	35.00	20.00	109.2	146.38
Jul.	27.22	32.22	22.22	35.00	20.00	86.4	148.33
Aug.	27.22	32.22	22.22	35.00	19.44	142.2	146.91
Sep.	27.22	32.22	22.22	35.00	18.89	165.1	142.68
Oct.	27.23	31.67	22.78	35.00	20.56	236.2	147.00
Nov.	26.67	30.56	22.78	33.89	20.56	246.4	136.86
Dec.	26.11	30.00	22.22	33.33	18.33	256.6	128.36
Year	26.99	31.62	22.36	34.77	19.54	2052	1682.5

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	781
Compensated thermicity index.....(Itc):	781
Simple continentality index.....(Ic):	2.2
Diurnality index.....(Id):	10.0
Annual ombrothermic index.....(Io):	6.34
Monthly dry ombrothermic index.....(Iod1):	3.17
Bimonthly dry ombrothermic index.....(Iod2):	3.57
Threemonthly dry ombrothermic index.....(Iod3):	4.12
Fourmonthly dry ombrothermic index.....(Iod4):	4.61
Annual ombro-evaporation index.....(Ioe):	1.22
Annual positive temperature.....(Tp):	3239
Annual negative temperature.....(Tn):	-0
Dry station temperature.....(Td):	819
Positive precipitation.....(Pp):	2052

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0°
Months	9	3	0	0	0

Latitudinal Belt...: Equatorial

Continentalty.....: Hyperoceanic - Low Ultrahyperoceanic

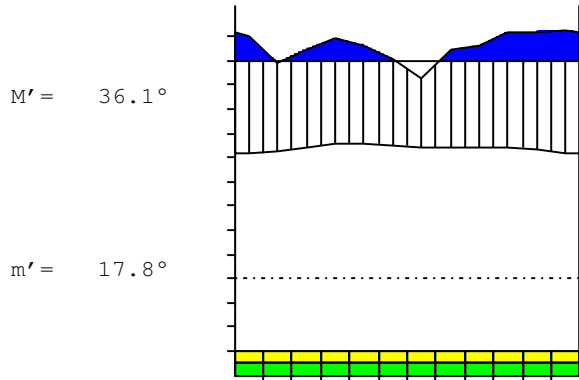
Bioclimate(Variant): TROPICAL PLUVIAL (HYGROPHYTIC)

Bioclimatic belt...: UPPER INFRA-TROPICAL LOW HUMID

TEMERLOH (MALAYSIA)

50 m

P= 2052 3° 27'N 102° 26'E 11/31 y.
 T= 27.0 ° Ic= 2.2 Tp= 3239 Tn= -0
 m= 21.7 ° M= 29.4 ° Itc= 781 Io= 6.3



**TROPICAL PLUVIAL (HYGROPHYTIC)
 UPPER INFRATROPICAL LOW HUMID**

WATER INDEX CARD

TEMERLOH (MALAYSIA)

Altitude: 50 m.

Latitude: 3° 27'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	25.6	118	198	0	100	118	0	80	86	0.6
Feb.	26.4	122	99	-23	77	122	0	0	43	-0.1
Mar.	27.2	146	152	7	84	146	0	0	22	0.0
Apr.	27.8	147	193	16	100	147	0	30	26	0.3
May.	27.8	153	168	0	100	153	0	14	20	0.0
Jun.	27.5	146	109	-37	63	146	0	0	10	-0.2
Jul.	27.2	148	86	-62	1	148	0	0	5	-0.4
Aug.	27.2	147	142	-1	0	143	4	0	2	0.0
Sep.	27.2	143	165	22	22	143	0	0	1	0.1
Oct.	27.2	147	236	78	100	147	0	12	6	0.6
Nov.	26.7	137	246	0	100	137	0	110	58	0.8
Dec.	26.1	128	257	0	100	128	0	128	93	0.9
Year	27.0	1683	2052	*	*	1679	4	374	374	*

R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

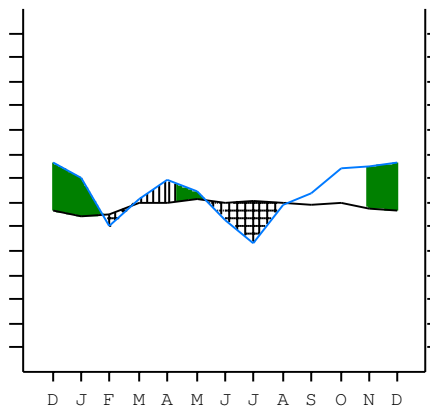
TEMERLOH (MALAYSIA)

3°27'N 102°26'E 50 m 11/31 y.

T= 27.0 Ic= 2.2
 m= 21.7 Tp= 3239
 M= 29.4 Tn= -0
 M' = 36.1 Itc= 781
 m' = 17.8 Io= 6.3
 P= 2052 mm ———
 PE= 1683 mm ———

**TROPICAL PLUVIAL (HYGROPHYTIC)
 UPPER INFRATROPICAL
 LOW HUMID**

	Imbibing	6 Aug.
■	Saturation	27 Oct.
▣	Reserve Use	9 May.
□	Deficit	6 Aug.



TEMERLOH (MALAYSIA)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A1b]
 + Type: A. Hyperoceanic
 + Subtype: 1. Ultrahyperoceanic
 + Variant: b. Low

Thermic types [A1.A1]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 1. Equatorial
 + Thermic type: A. Warm
 + Thermic subtype: 1. Torrid

Bioclimatic types [A5.1a.7b]
 + Macrobioclimate: A. TROPICAL
 + Bioclimate: 5. PLUVIAL
 + Bioclimatic variant ..:
 + Thermic type.....: 1. INFRATROPICAL
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 7. HUMID
 + Ombrothermic subtype : b. LOW

Bioclimatic Classification: Trhd.Itr.Hum

TEMERLOH (MALAYSIA)

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 851
 Coldest semester of the year.....(Psw): 1202
 Warmest four months period of the year.....(Pcm1): 622
 Following warmest four months period.....(Pcm2): 630
 Positive precipitation dryest 3 months.....(Ppd): 338
 Positive precipitation dryest 2 months.....(Ppd2): 196
 Positive precipitation dryest 1 month.....(Ppd1): 86
 Positive precipitation warmest 3 months.....(Pps): 470
 Positive precipitation warmest 2 months.....(Pps2): 361
 Positive precipitation warmest 1 month.....(Pps1): 193
 Positive precipitation coldest 3 months.....(Ppw): 554
 Positive precipitation coldest 2 months.....(Ppw2): 455
 Positive precipitation coldest 1 month.....(Ppw1): 198

Seasons	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4
Rainfall	553	513	337	647

Tropical rainfall rhythms: 4 > 1 > 2 > 3**TEMERLOH (MALAYSIA)**

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 27.8
 Average coldest month [T].....(Tmin): 25.6
 Maximum temp. warmest month [M].....(Tmmax): 32.8
 Minimum temp. coldest month [m].....(Tmmin): 21.7
 Absolute Max.temp. warmest month [M'].....(Tamax): 36.1
 Absolute Min.temp. coldest month [m'].....(Tamin): 17.8
 First warmest contrasted month [M].....(Tcmax): 32.2 (3)
 First coldest contrasted month [m].....(Tcmin): 22.2 (3)
 Dry station temperature.....(Td): 819
 Positive temperature dryest 3 months.....(Tpd): 819
 Positive temperature dryest 2 months.....(Tpd2): 547
 Positive temperature dryest 1 month.....(Tpd1): 272
 Positive temperature warmest 3 months.....(Tps): 831
 Positive temperature warmest 2 months.....(Tps2): 556
 Positive temperature warmest 1 month.....(Tps1): 278
 Positive temperature coldest 3 months.....(Tpw): 781
 Positive temperature coldest 2 months.....(Tpw2): 517
 Positive temperature coldest 1 month.....(Tpwl): 256

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SEASONAL PARAMETERS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Warmest semester...(Sms)			o	o	o	o	o	o				
Dryest semester...(Smd)		o	o	o	o	o	o					
Warmest 4 months...(Cm1)			o	o	o	o						
Dryest 4 months...(Cmd)						o	o	o	o			
Vegetation Activity(Pav)	o	o	o	o	o	o	o	o	o	o	o	o
Ultragelid...[M' <=0] (Pf)												
Hypergelid...[M <=0] (Pf)												
Gelid.....[T <=0] (Pf)												
Subgelid....[m <=0] (Pf)												
Pregelid....[m' <=0] (Pf)												
Agelid.....[m' > 0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o
HiperAgelid..[all>0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.82
Mediterranean index of July.[PE/P].....(Im1): No
Mediterranean index of July & August.....(Im2): No
Mediterranean index of June, July & August....(Im3): No

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	2566	1981	991	1524	1930	1676	1092	864	1422	1651	2362	2464
Tp	261	256	264	272	278	278	275	272	272	272	272	267
Io (Iom)	9.83	7.75	3.76	5.60	6.95	6.03	3.97	3.17	5.22	6.07	8.67	9.24
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	5538 / 781			5130 / 828			3378 / 819			6477 / 811		
Io (Iot)	7.095			6.197			4.123			7.984		
Semesters	December-May						June-November					
Pp(x10)/Tp	10668 / 1608						9855 / 1631					
Io (Iosm)	6.633						6.044					

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 2.22
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 42.31
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 2.23
+ Hyperoceanic (-20<CI<20)
CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 1.03
+ Oceanic (0.6<CI<1.1)
Rainfall Index of Lang (1925) [R=P/T]: 76.03
+ Temperate warm (100>R>60)
Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 55.48
+ Humid (60>Ia>30)
I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)]: 339.26
+ Humid (Q>90)
I of Dantin & Revenga (1940) [DR=100*T/P]: 1.32
+ Humid (2>DR>0)
Aridity Index of UNEP [I=P/PE]: 1.22
+ Humid (I>0.65)
Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 32.08
+ Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)

- + Climate: A. Warm and temperate warm
- + Region: 6. Termoaxeric (Axeric warm)
- + Thermic type: 1. Megathermic

Thorntwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.78	0.35	0.56	0.72	0.62	0.38	0.30	0.52	0.61	0.91	0.97	1.03
T-E ratio	11.50	11.88	12.25	12.50	12.50	12.38	12.25	12.25	12.25	12.25	12.00	11.75
Precipitation-effectiveness: 77.48						Temperature-efficiency: 145.75						
Moisture Index [MI=100*(P-PE)/PE]: 21.98 + B1.Humid low-humid (20<MI<40) Index of dryness [DI=100*d/PE]: 0.23 + No deficit (0<DI<16.7) Index of humidity [HI=100*s/PE]: 22.20 + Strong surplus (20<HI) Potential Evapotranspiration PE: 1682.51 + Megathermic (PE>1440)												

