

-

aawl@yahoo.com . - - - *

-

FAO

1900

%75

305

FAO

440

950 551

. (/ 950 - 551)

1800

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(2004 Gong ; 2004 Debacke)

.(2004 Debacke)

Al - ; (1964) Al - Barrak ; (2011) ; (1982)

- (1979) Ramadhani

(1983)

. 2012 / 2 / 2

. 2012 / 5 / 20

(2006) / 900
 / 855 740
 - 30 (2006) (1982)
 (1980) Kharrufa / 700
 - Doorenbos) FAO
 - (1977 Pruitt Doorenbos) FAO
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 . (1977 Pruitt Doorenbos) FAO - 5 ()
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 ()
 ()
 (FAO)
 Kc

$$ET_o = C [P (0.46\% + 8)]$$

$$ET_c = ET_o - \frac{ET_o^2}{P + C}$$

(1977 Pruitt Doorenbos) (FAO)
 ET_o

$$Etc = ET_o \times Kc$$

$$ET_c = ET_o - \frac{ET_o^2}{P + C}$$

$$Etc = ET_o \times Kc$$

(1)
 1990 - (182)
 / 2024 -
) FAO
 / 2007 (A
 (1964) Al Barrak ; (2011)
 (1979) Al-Ramadhani ;
 (1)
 %75 -
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FAO

	/ ETo -												
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1990	51	81	148	201	275	301	274	253	168	124	78	51	

(1) -

(2)

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	12	11	10	9	8	7	6	5	4	3	2	* 1	
400						106	92	52	30	10	58	52	
380						96	82	52	30	10	58	52	
496				55	108	65	42	21	15	20	72	50	
430								18	95	132	113	72	
305							80	60	40	25	35	60	
1800			188	309	304	225	142	122	90	56	40	38	
332	80	146	10	20	35	50	40	25	47	45	40	10	**

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/ 400

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496

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(3)

950

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3

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	12	11	10	9	8	7	6	5	4	3	2	1	
950						30	225	275	210	110	65	30	
715							76	226	180	109	65	40	
820							39	200	230	198	105	48	
625							105	237	122	69	62	40	
675								110	205	195	113	52	
605								170	200	50	45	40	
550								81	248	126	30	65	
850					75	140	190	185	132	67	43	18	

/ 512 - 442

(2011)

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(1977)

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30

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CALULATION OF CROP WATER REQUIREMENT FOR SOME CROPS IN ABU GHRAB.

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ABSTRACT

The study was initiated to estimate the water requirements for some winter and summer crops using a metrological depth available from Al-Raad experimental station. Blaney – Griddle equations by FAO was used to estimate the potential evapotranspiration. The plant factors for each crops were used from those a variable from FAO. The results of this study showed that the potential evapotranspiration for central of Iraq was 1990 mm / year. Months of May , June , July , August and September showed 75% of this potential evapotranspiration . The crop water requirement for winter crops was between 305 mm for broad beans and 440 mm for bersean . Other crop water requirements were between these ranges . For the summer crops the water requirements were ranged between 950 mm for cotton to 551 mm for Potato , other crops such as sunflower , soybean , season water requirements between thexs figanes . All the finfing of crop water requirements by the calculation method were lie between the ranges recommended by FAO , except the Alfalfa crops water requirement value exceed these ranges.

Keywords: Evaporation, Transpiration, Winter crops, Summer Crops, crops water requirements.