## References

- **Abd Mishani, C. and J.Jafari-Shabestari (1988).** Evaluation of wheat cultivvars for drought resistance. Iranian J.of Agric Sci., 19 (1-2):37-43.
- Abd El-Gawad, A.A.; S. El-Habbal; A.S.A. Edris and Elham A.Drorgham. (1993). Effect of water stress during filling period and nitrogen fertilization on yield and its attributes of two wheat genotypes. Egypt. J.Agron., 18 (1-2):211-227.
- Abo Shetaia, A.M.and A.A.Abd El-Gawad (1995). Growth, yield and yield attributes of wheat in relation to N fertilization and with holding an irrigation at different stages of growth. Annals Agic. Sci., Fac. Agric.m Ain Shams Univ., Cairo, Egypt, 40(1):195-211.
- **Abo Warda, A.M.A. and E.M.Sadek** (1998). Effect of nitrogen fertilization levels on yield components of triticale and wheat Egypt. J.Appl. Sci., 13 (1)105-113.
- Ahmad, R.; J.C. Stark; N. Ahmad and A. Tanveer (1998). Grain yield and yield components of spring wheat genotypes at different moisture regimes. Journal-for-Scientific-Research -Agricultural-Sciences 3 (2): 13-19.
- Ahmad, M; M.A. Arain and K.A. Siddiqui (1997). Grain weight, protein and lysine content of water-stress tolerant bread wheat. 16 (1-2): 62-66.
- Ali Dib, T. ;Ph. Monneveux and J.Araus (1990). Breeding durum wheat for drought tolerance analytical sunthetical approoaches and their connection. Proc. Of Intern. Symp. June 4 <sup>th</sup> 8 <sup>th</sup> , Aberna, Bulgaria, Agric. Acad., 88:224-240.

- Amar, F.B. (1999). Genetic advances in grain yield of durum wheat under low-rainfall conditions. 18 (1): 31-33.
- Amer, F., W., El- Ghamery; M. El-Rouby and M.Emara (1989). Water management and nitrogen fertilization of wheat in shallow water table soil and limited rainfed. Egypt. J. Soil Sci., 29 (4) 358-371.
- Annicchiarico, P.and L.Pecetti (1990). Visual evaluation of drought tolerance in durum wheat germplasm under field conditions: Efficacy and comparison of scorres of different complexity. Cereal Research Communications. 18:1-2,67-74.
- Annicchiarico, P; L. Pecetti and A.B. Damania (1995). Relationships between phenotypic variation and climatic factors at collecting sites in durum wheat landraces. Italy. Hereditas-Landskrona. 122(2): 163-167.
- A.O.A.C. (1955) Association of official Agricultural Chemists, Official methods of analysis. 8 <sup>th</sup> ed., Washington, D.C.
- Bayoumi, Y.T. (1999). Variability in morphophysiological characters and its relation to drought tolerance in some field crops Ph. D. Thesis, Agric. Dept., Suiz Canal Univ.
- Blum, A.; G. Golan; J. Mayer; B.Sinmena; L. Shpiler and J.Burra. (1989). The drought response of landraces of wheat from the nortern Negev desert in Israel. Euphytica, 43:87-96.
- **Blum, A. and Y.Pnuel.** (1990). Physiological attributes associated with drought resistance of wheat cultivars in a Mediterranean environment. Aust. J.Agric Res., 41:799-810.
- Bruckner, P.L. and R.C.Frohberg (1987). Stress tolerance and adaptation in spring wheat Crop. Sci., 27:31-36.

- **Fischer, R.A. and R.Maurer (1978).** Drought resistance in spring wheat cultivars: I.Grain yield response Asut. J.Agric Res., 29 (5): 897-912.
- Frederick, J.R. and J.J.Camberats (1995). Water and nitrogen effects on winter wheat in the Southeastern Coastal Plain I-Grain yield and kernel traits. Agron. J.,87:521-533.
- Gafar, El-S.M.M. (1990). Biochemical studies on drought in some plants Ph. D. Thesis Fac. of Agric., Zagazig Univ. Egypt.
- Garrity, D.P. and J.C. O'Toole (1995). Selection for reproductive stage drought avoidance in rice using infrared thermometer. Agron. J.87(4):773-779.
- Gebeyehou, G. and D.R. Knott (1983). Response of durum wheat cultivars to water stress in the field and greenhouse. Canadian-Journal-of-Plant-Science, 63(4): 801-814.
- Ghandorah, M.O.; I.I.El-Shawaf; Kh.A.Moustafa and A.M.Gadallah. (1997). Evaluation of some early genotypes of bread wheat genotypes grown under heat and water stress at the central region of Saudi Arabia. Arab. Gulf. J.Sci. Res., 15 (2):505-523.
- Gharti, Chhetri, G.B. and J. S. Lales (1998). Yield and yield components of spring wheat (Triticum aestivum L.) subjected to drought in a tropical environment. Philippine-Agriculturist. 71: (2), 165-172.
- Gharti, Chhetri, G.B. and J.S. Lales (1990). Effect of drought on yield and yield components of nine spring wheat (Triticum aestivum) cultivars at reproductive stage under tropical environmental conditions. Belgian-Journal-of-Botany. 123: 1-2, 19-26.

- Giunta, F.; R. Motzo and M. Deidda (1995). Effects of drought on leaf area development, biomass production and nitrogen uptake of durum wheat grown in a Mediterranean environment Australian-Journal-of-Agricultural-Research. 46 (1): 99-111.
- Gummuluru, S.; S.L.A. Hobbs and S.Jana (1989). Genotypic variability in physiological characters and its relationship to drought tolerance in durum wheat. Can J. Plant Sci., 69:703-711.
- Ibrahim, M.E.; A.A.Ali; S.A.El-Shamerka and A.A.Nawar (1995). Evaluation of new promising wheat genotypes under Egyptain agricultural conditions. Menofiya J.Agric. Res., 20 (3):963-986.
- Islam, M.A.(1990). Breeding wheat for high grain yield, early maturity and adaptability. Proceedings of Workshop on Bangladesh Agric. Res., Progress Mymensingh (Bangladesh) BAU, 1-7.
- Islam, M.I. and M.A. Islam. (1991). A review on the effect of soil moisture stress on the growth phases of wheat. Bangladesh J. Training and Development, 4(2):49-54.
- Ismail, M.I.; M.Duwayri, M.Nachit and O.Kafawin (1999).

  Association of yield and drought susceptibility index with morphophysiological traits among related durm wheat genotypes subjected to water stress at various growth stages. Dirasat-Agricultural- Sciences. 26 (2) 198-204.
- Jafari, Shabestari, J. and C. Abd-Mishani (1987). Effects of different levels of irrigation and nitrogen fertilizer on yield and other agronomic characters of irrigated winter wheat Iranian-Journal-of-Agricultural-Sciences. 17 (3-4): 53-61.
- Jana, P.K, and H.Sen (1978). Effect of different stafges stages of irrigation on the growth and yield of wheat. Indian J.Agron., 23 (1)19:22.

- Jat, K.R.; R.N.Muralia and A.Kumar. (1991). Physiology of drought tolerance in wheat (*Triticum aestivum* L.) II-Water potential and its components. Journal of Agronomy and Crop Science. 167 (2):73-80.
- Johnson, R.C.; H.T. Nguyen and L.I.Croy (1984). Osmotic adjustment and solute accumulation in two wheat genotypes differing in drought resistance. Crop Sci., 24:957-961.
- Khattab, A.K.A. (1994). Tolerance of some wheat varieties to water deficiency. M.Sc. Thesis, Fac. Agric., Al-Azhar Univ., Egypt
- **Kheiralla, K.A.** (1994). Inheritance of earliness and its relation with yield and drought tolerance in spring wheat. Assiut-Journal-of-Agricultural-Sciences. 25 (5): 129-139.
- Kheiralla, KA; A.A. Ismail and G.R. El-Nagar (1997). Drought tolerance and stability of some spring wheat cultivars. Assiut-Journal-of-Agricultural-Sciences. 28 (1): 75-88.
- Kheiralla, K.A.;R.A. Dawood and E.A.Teama (1993). Performance of some wheat cultivars for grain yield and excised leaf water loss as an indicator of drought resistance under different levels of nitrogen. Assiut J.Agric. Sci., 24(2)293-310.
- Koraiem, Y.S., A.I.Nawar and M.I.Motawei (1997). Yield stability of wheat genotypes under drought stress Adv. Agric. Res., 2:25-36.
- **Kyzeridis, N; A. Biesantz and P. Limberg (1995).** Comparative trials with durum-wheat landraces and cultivars in different ecological environments in the Mediterranean region. Journal-of-Agronomy-and-Crop-Science. 174 (2): 133-144.
- Li-XingPu; Sun, FR; Guo, BH; Liu, LR and Pang, CM (1997).

  Evaluation of abiotic stress resistance in Hebei winter wheat genetic resources. China. Wheat-Information-Service No. 85 (1-6).

- Magrin, G.O. (1991). Rooting depth, growth cycle duration, and timing of the jointing stage in wheat. Traits that can contribute to early drought tolerance. Wheat for the Nontraditional Waren Areas (edited by Sawnders, D.A.), 509-515, Mexico, CIMMYT.
- Mahgoub and Hayam, S.A. (1990). Effect of sowung date and nitrogen levels on yield components of some varieties of durum wheat. M.Sc.Thesis, Fac. Agric., Cairo Univ., Egypt.
- Main, M.A., J.H. Brown and H.Ferguson. (1989). Leaf water potential, relative water content, and diffusive resistence as sereening techniques for drought resistance in barley Agron. J., 81:100-105.
- McMaster, G.S.; W.W.Wilhelm and N.S.Bartling (1994). Irrigation and culm contribution to yield and yield components of winter wheat. Agron. J., 86 (6):11123-1127.
- **Mohamed, A.I.S.**(1997). Evaluation of wheat genotypes under water stress conditions in Northern Studan Rachis, 16(1/2):86-87.
- Moustafa, M.A., L.Boersma; and W.E.Kronstad. (1996). Response of four spring wheat cultivars to drought stress. Crop Sci., 36:982-986.
- Nachit, M.M (1991). Spring durum wheat breeding. In Cereal Improvement Progrm. Annual Report for 1990. Pp50-63. Icarda, Aleppo, Syria.
- Nachit. M.M.and H.Ketata (1989). Selection of morpho-physiological traits for multiple abiotic stress resistance in durum wheat (*Triticum Turgidum L. var. durum*) Pp.391-400 In "Physiology Breeding of winter Cereals for Mediterranean Environments" (Montpellier, France, 3-6 July) Ed. INRA.

- Ozturk, A; O. Caglar; D. Anac (ed.) and P. Martin, Prevel (1999).

  The effect of drought in different growth stages on uptake, translocation and utilization of N in winter wheat. University of Ataturk, Faculty of Agriculture, Turkey. 135-138; 12 ref.
- Pavlov, A.N. (1984). Physiological changes in spring wheat plants under the influence of growing conditions leading to differences in grain protein content. Sel'skokhozyaistvennaya-Biologiya. No.1, 24-29.
- Quarrie, S.A. and H.G. Jones (1979). Conductance, and abscisic acid concentration in spring wheat subjected to artificial drought stress. Ann . Bot. 44:323-332.
- Rana, V.K and S.C. Sharma, SC (1997). Correlation among some morpho-physiological characters associated with drought tolerance in wheat. Crop-Improvement. 24 (2): 194-198.
- Rickert, K.G.; R.H. Sedglet and W.R.Sterm (1987). Environmental response of spring wheat in the South Western Asutralin Cereal Belt. Aust. J.Agric. Res., 38:655-670.
- Sabry, S.R.; M.M.Abdel Aleem and N.S.Hanna (1994). The effect of supplementary irrigation on grain yield of rainfed wheat in the north west coast region of Egypt. Bull. Fac. Univ. Cairo, 45(3):629-638.
- Sadiq, M., K.Sidiqui; C. Arian and A.Azmi (1994). Wheat breeding in a water-stressed environment I-Delineation of drought tolerance and susceptability. Plant Breed., 113:36-46.
- Saulescu, N.N.; W.E.Kronstad and D.N. Moss (1955). Detection of genotypic differences in early growth response to water stress in wheat using the snow and tingey system. Crop Sci, 35:928-931.

- Semaika, M.R.(1994). Wheat evapotranspiranspiration, production and its water use efficiency under supplementary irrigation in the north west coast region in Egypt. Proc. Possibilities of permanent Rainfed Agric. In Egypt, Cairo, Egypt.
- Simane, B.; P.C.Struik and R. Rabbinge (1998). Growth and yield component analysis of durum wheat as an index of selection to terminal moisture stress. Ethiopia. Tropical-Agriculture. 75 (3): 363-368.
- Sinha, S.K.; P.K.Aggarwal; G.S.Chaturvedi; A.K.Singh and K.Kailaosnathan. (1986). Performance of wheat and triticale cultivars in a variable soil-water environment. I-Grain yield stability. Field Crops Res., 13:289-299.
- Shalaby, E.E.; M.M. El-Ganbeehy; and M.H.El-Sheikh (1992).

  Performance of wheat genotypes under drought stress. Alex.

  J.Agric Res., 37 (1)15-33.
- Shen, Dong Feng; Gao, HaiTao; D.F. Shen and H.T. Gao (1998). Yu Mai 38, a new wheat cultivar with resistance to drought. Luoyang Institute of Agricultural Sciences, Crop-Genetic-Resources., No. 1, 52.
- Sndecor, G.W. and W.G. Cochran (1967). Statistical methods (6 <sup>th</sup> ed)
  Oxford and IBH Publishing Co., 395 pp.
- Steduto, P.; L.Sisto; V.Magliulo; M.Centritto and Alvino. (1992).

  Influence of water stress on the spike fertility of some wheat cultivars. Irrigation-e-Drenaggio (Italy) Abst., 39:24-28.
- Tawfelis, M.B.; M.G.Mosaad and A.M.A.Shafi-Ali (1998). Effect of irrigation interval on wheat grain yield in Egypt New Lands NVRSRP.

- Tomar, R.K., J.S. Raghu; L.N.Yadav and R.S.Churayya (1993).

  Response of wheat (*Triticum aestivum* L.) varieties to irrigations under different fertility levels. Indian J.Agron., 38 (2)291-293.
- Trethowan, R.M., O. Abdalla and W.H.Pfeiffer (1991). Evaluation of the rate and duration of grain filling in triticale and its association with agronomic traits. Proceeding of the second International Triticale Symposium- Mexico. CIMMYT. 128-130.
- Turner, N.C., P. Prasertsak and T.L.Setter (1994). Plant spacing, density and yield of wheat subjected to post-anthesis water deficit. Crop Sci., 34(3):741-748.
- **Uddinn, N.M.and D.R. Marshall (1989).** Effect of dwarfing genes on yield and yield components under irrigatted and rainfed conditions in wheat (*Triticum aestivum L.*). Euphytica, 42: 127-134.
- Wery, J.; S.N.Silim E.J.Kingths; R.S.Malthotra and R.R.Cousin (1994). Sereening techniques and sources of tolerance to extremes of moisture and air temperature in cool season food legume. Eupphytica, 73:73-83.
- Winslow, M.D. and N. Smirnioff (1984). Physiological techniques used to screen breeders' nurseries for drought resistance. Rachis, 3(2):44-46
- Winter, S.R.; J.T. Musick and K.B. Porter. (1988). Evaluation of screening techniques for breeding drought resistance winter wheat. Crop Sci., 28: 512-516.
- Yousif, K.M.R. and N.S.Hanna. (1998). Evaluation of some bread wheat varieties to yield and water relations at Fayoum Governorate. Fayoum J.Agric. Res.Dev., 12 (2)216-229.

- Zhand, H.X. Wang; M.You and C.Liu. (1999). Water yield relations and water use efficiency of winter wheat in the North China pPlain. Irrigation Sci., 19 (1):37-45. {Cited after Literature Update on wheat, Barley and Triticale, Vol. 1 (2)2000 (536)}.
- Zhang, JL; L.L. Kang; Y.C. Wei and Y. Zheng (1993). Effects of nitrogen fertilizer on physiological property and yield of wheat at the different soil moisture. Acta-Agriculturae-Boreali-Sinica. 8: Supplement, 92-97.