

CURRICULUM VITAE



A. Personal Data:

1. **Name:** Dheya P. Yousif
2. **Nationality:** Iraqi
3. **Place and Date of Birth:** Nenawa, Iraq- Feb. 2, 1959.
4. **Mailing Address:** Department of Plant Breeding & Genetics, Ministry of Science & Technology, Baghdad, Iraq.
5. **Home Address:** Baghdad, Hay Al-Amin, 739/2/48 Phone: +9641 7657884
e-mail: dpyousif@yahoo.com Mobile: +964 7902 712 636, +964 7703 901 334
6. **Sex:** Male
7. **Height:** 174 cm. **Weight:** 86 kg.
8. **Mother Language:** Arabic
9. **Languages with Proficiency:** English
10. **Others:**
 - **Wife Name:** Hala Dawoud Noori
 - **Wife Education:** Department of Mechanical Engineering, Al-Technology University.
 - **No. of Children's:** 4

11. Education:

- 1997 Ph.D., Plant Breeding and Genetics, Department of Field Crops, College of Agriculture, University of Baghdad.
- 1987 M. Sc., Plant Production (Agronomy), Department of Field Crops, College of Agriculture, University of Baghdad.
- 1981 B.Sc., Agronomy, Department of Agronomy, College of Agriculture and Forestry, University of Mosul.

12. TITLES AND ABSTRACTS OF:

- **Ph. D. Thesis:** *Estimation of some genetic parameters in breeding of maize hybrids.*

Abstract

The 10 x 10 local inbred lines diallel cross with no reciprocals was set up in a randomized complete block design with three replications. The objective of this study was to assess the heterosis percentage, general and specific combining abilities (GCA & SCA), applying Griffing's second method – model I (fixed), additive and non additive genetic variance ($\sigma^2 A$ & $\sigma^2 D$), the degree of dominance (α), the broad and narrow sense heritability, and the simple correlation among characters under investigation. The 50% tasseling and silking dates, plant and ear height, no. of leaves, total leaf area, no. of ears per plant, no. of rows per ear, kernels per row, weight of 300 kernels, and grain yield per plant were studied. Statistical analyses and genetic parameters for each season and combined analysis were used.

The results revealed high significant differences among the different genotypes (parents and their crosses) under investigation except the number of kernels per row in fall 1995, this result reflected the genetic variation among genotypes. However, significant differences between years were found for all characters except the , no. of ears per plant and the no. of kernels per row. The average performance of the genotypes for the two fall seasons, and the genotype – environment interactions (G x E) showed the significant effects for all characters. Significant heterotic patterns were found for all characters except the total leaf area. This result could be explained due to partial – complete, and overdominance. The GCA and SCA effects for each season and for the GE interactions were significant for all characters except for ear height (GCA effect) and no. of ears per plant (SCA effect) in fall 1995. However, no significant effect for the no. of rows per ear as average of fall 1994 and 1995 was found for the SCA effects.

The proportion of GCA/ (GCA + SCA) mean squares for each season was high. While, low values were found in the combined analysis for the weight of 300 kernels in fall 1994, and the ear height in fall 1995.

The degree of dominance was larger than one for all characters. This result revealed overdominance gene action.

The MAR-93, MAS-95, MUH-95, MAL-197 inbred lines were the most exceeded in their combining ability for the most characters under investigation. The single cross hybrids (MAR-93 x MAS-95, MUH-95 x PYA-19, MAL-197 x PYA-19) gave the highest grain yield per plant, in addition to the other desirable agronomic characters.

The results indicated that it would be beneficial to use local inbred lines for commercial hybrid seed production, and/ or synthetic varieties.

- M. Sc. Thesis: Effect of plant density, and planting date on yield, yield components and quality of Popcorn “*Zea mays L. everta*”.

Abstract

An experiment was conducted in a silt clay loam soil at the College of Agriculture Experiment Station, Abu-Ghraib; Baghdad in spring and autumn seasons of 1986. The main objective was to find out the effect of plant density and planting date together with the effect of planting dates on yield, yield components, and other characters with emphasis on popping volume of Popcorn “*Zea mays L. everta*” variety Shamia Babil, using a split plot in a randomized complete block design with four replications. Experimental plot sizes were 3 x 5 m. Planting dates (1, 16, 31 of March and 15 of April for the spring season and 1, 16, 31 of July and 15 of August for the autumn season) were taken as the main treatment. Whereas, plant densities (53 333, 66 666, and 88 888 plant/ha) were presented the sub treatments.

Data reported for the following characters: mid silking, plant and ear height, leaf area index (LAI), grain yield, yield components and popping volume was analyzed independently for each character and each season using the analysis of variance method. Results and conclusions that could be drawn from this study were summarized as follows:

1. The best plant density was 88 888 plant/ ha. In both seasons. While, the best planting dates were the mid of March and the late of July in spring and autumn seasons, respectively.
2. The best plant densities significantly affected all the characters studied except mid silking, ear number, ear height, no. of rows per ear, weight of 300 kernels and popping volume in spring season. However, plant density significantly affected the no. of ears per plant, no. of rows per ear, LAI, and grain yield.
3. Planting dates significantly affected all the characters under investigation with the exception of ear length in spring and weight of 300 kernels in autumn season.
4. No significant interaction was found between plant densities and planting dates for all characters except grain yield, % protein content, and LAI in spring only.
5. Planting on the 1st of March with 66 666 plant/ ha. gave the highest popping volume in comparison with all other dates and plant densities.

13. Scientific Degree: older scientific researcher (Assistant Professor).

14. Current position: Head, Center of Plant Breeding & Genetics; Agriculture Research and Food Technology Directorate.

B. Medical Report:

1. **Blood Type:** B+
2. **Normal Blood Pressure:** 13/9
3. **General Health:** The ability is to work with full capacity.

4. Infectious Disease: None

C. Society Memberships:

1. Society of Iraqi Agricultural Engineers, since 1981.
2. American Society of Agronomy (ASA), since 1986.
3. Crop Science Society of America (CSSA), since 1986.
4. Iraqi Field Crops Committee, since 1995.

D. Brief Description for Scientific works:

1. Senior Maize breeder since 1991
2. Senior Sunflower breeder since 1992
3. Senior Durum Wheat breeder since 1997
4. Senior Breed Wheat breeder since 1998
5. Deduce a new open pollinated Maize variety (Al-Masarra) suitable for fall cultivation in Iraq in 2001. In addition to deducing Al-Safa Popcorn variety (1996) suitable for fall cultivation, Al-Rabee synthetic Maize variety (1994) suitable for spring cultivation; and the contribution in deducing Al-Noor, Al-Hashmia, and AL-Milad bread Wheat cultivars at the late of 1990.
6. Diploma awarded from the International Center for Maize and Wheat Improvement (CIMMYT) as a visiting scientist in May 2000.
7. Several studies, reports and specific research were submitted for different conferences and official reasons.
8. The contribution with preparing, and construction of Seed Technology Center (Bain Al-Nahrayn Co., later).
9. Consultant at Al-Rabee Center for Crop Research, Ministry of Industry, since 1995.

10. Publications:

1. **Yousif, D.P.;** and H.Ch. Ali. 1989. Effect of planting date and plant density on yield, popping expansion and other agronomic characters of popcorn. Mesopotamia J. Agric., 21(3): 171-187.
2. Ali, H. Ch.; and **D.P. Yousif.** 1989. Popcorn. Extension Bulletin, General Board for Extension, Ministry of Agriculture, Baghdad- Iraq.

3. **Yousif, D.P.**; H.Ch. Ali; and R.A. Latif. 1990. Effect of date of seeding and kernel size on popping expansion and other traits of popcorn (*Zea mays* L. everta). J. Iraqi Agric. Sci., 21(2): 55-65.
4. **Yousif, D.P.**; A.A.M. Al-Jibouri; and W.M. Al-Rawi. 1991. Response of different sunflower (*Helianthus annuus* L.) genotypes to callus formation and tolerance. J. Iraqi Agric. Sci., 22(1): 13-22.
5. Al-Jibouri, A.A.M.; W.M. Al-Rawi; and **D.P. Yousif**. 1991. Induction of male sterility in sunflower by gibberellic acid. J. Iraqi Agric. Sci., 22(1): 23-30.
6. **Yousif, D.P.** 1992. Maximizing genetic improvement of Sunflower. 1st Arab Symp. Sunflower Breeding. Arab Sci. Res. Council Union, Nov. 15-16, 1992. Baghdad, Iraq.
7. **Yousif, D.P.**; A.M. Al-Jibouri; and W.M. Al-Rawi. 1992. Effect of gibberellic acid on flower fertility of Sunflower (*Helianthus annuus* L.). 8th Sci. Conf. Agric. Engineers Society, Nov. 16-18, 1992. Baghdad, Iraq.
8. **Yousif, D.P.**; and H.Ch. Ali. 1992. Effect of plant density and planting date on popping expansion, yield, and yield components of popcorn (*Zea mays* L. everta). J. Tech. Res., 5,6 June 1992.
9. **Yousif, D.P.**; A.M. Al-Jibouri; and A.A. Mahdi. 1992. Test of general combining ability and salt tolerance of Sunflower (*Helianthus annuus* L.). Lines. IPA J. Agric. Res., 2(2): 152-161.
10. **Yousif, D.P.**; A.A.M. Al-Jibouri; and W.M. Al-Rawi. 1992. Estimates of general combining ability in Sunflower inbred and mutant lines. J. Islamic Acad. Sci., 5: 305-308.
11. **Yousif, D.P.** 1993. Breeding of field crops for pest resistance. Alternative of Herbicides. Symp. For Pest Resistance. Feb. 6-8, 1993. AOAD, Al-Khartoum, Sudan.
12. Omar, M.S.; **D.P. Yousif**; A.A.M. Al-Jibouri; M.S. Al-Rawi; and M.K. Hameed. 1993. Effects of gamma rays and sodium chloride on growth and

- cellular constituents of sunflower (*Helianthus annuus* L.) callus cultures. J. Islamic Acad. Sci., 6(1): 69-72.
13. **Yousif, D.P.;** N.F. Jabbo, M.Z. Khalaf, A.H. Majeed and H.Ch. Ali. 1994. Effect of low gamma rays doses on agronomic traits, yield and its components of two maize varieties. Dirasat, Appl. and Pure Sci., 21B(6): 61-73.
 14. **Yousif, D.P.** 1994. Genetics and breeding basis of soma clonal variation. J. Agric. And Develop. Arab Nat., 13(1): 52-55.
 15. **Yousif, D.P.;** H.Ch. Ali, A. M. Al-Jibouri and A. H. Majeed. 1997. Development of a new corn variety (Al-Rabee) for spring cultivation in the central region of Iraq. I. Breeding Programme. Dirasat, Agric. Sci., 24(1): 84-95.
 16. **Yousif, D.P.;** A.M. Al-Jibouri; and M.K. Hameed. 1998. Effect of water stress on callus growth and cellular constituents of two Sunflower cultivars exposed to gamma rays. J. Arab Agric. Res., 2(1): 1-13.
 17. **Yousif, D.P.** 1998. Heritability estimates of variation for salinity tolerance in seedlings of Sunflower (*Helianthus annuus* L.) topcrosses. 2nd Sci. Conf. of Agric. Coll., March 30-31, 1998. Al-Anbar Univ., Iraq.
 18. **Yousif, D.P.;** H.Ch. Ali; A.H. Majeed; N.F. Jabbo; and L.S. Mohammed. 1998. Estimation of general combining ability in 162 S1 and S2 progenies of corn (*Zea mays* L.) lines by topcrossing. Dirasat, Agric. Sci., 25(1): 1-5.
 19. **Yousif, D.P.;** H.Ch. Ali; J.N. Mahmoud; and A.H. Majeed. 1998. Comparison study of different corn varieties for spring cultivation in the central region of Iraq. Dirasat, Agric. Sci., 25(1): 116-124.
 20. **Yousif, D.P.** 1999. Popcorn breeding by hybridization and selection. J. Arab Agric. Res., 3(2): 176-189.
 21. Hassan, I.I.; **D.P. Yousif;** A.S. Hadi; H.A. Khudhair; N.H. Abood; and L.S. Mohammed. 1999. Variability of various Sunflower genotypes for salt tolerance. Ibn Al-Haitham J. Pure & Appl. Sci., 12(3): 7-15.

22. Al-Jibouri, A.A.M.; K.A. Jadooa; M.S. Selbi; **D.P. Yousif**; and M.A. Al-Sudani. 1999. Release of two wheat (*Triticum aestivum* L.) cultivars for irrigated areas in Iraq. Iraqi J. Agric. (Special Issue) 4(2): 1-16.
23. **Yousif, D.P.** 2000. Maize and wheat breeding and practices in Iraq. Country Rep., the Int. Ctr. Maize and Wheat Improvement. Mexico, D.F., Mexico.
24. **Yousif, D.P.**; A.H. Majeed and M.A. Aied. 2000. Evaluating of Al-Rabee variety in comparison with different corn varieties for fall cultivation. Sci. J. Iraqi Atom. Energy Comm. 2: 74-82.
25. Al-Jibouri, A.A.M.; **D.P. Yousif**; and A.A. Mahdi. 2000. Selection for general combining ability in Sunflower (*Helianthus annuus* L.) by top crossing. Sci. J. Iraqi Atom. Energy Comm. 2: 83-91.
26. **Yousif, D.P.**; A.Kh. Abass; and N.M. Saead. 2000. Deduce of inbred lines with high oil content in Sunflower (*Helianthus annuus* L.). Iraqi J. Sci., 41B(1): 51-60.
27. Whaib, K.M.; A.M. Haider; **D.P. Yousif**; F.A. Al-Tayar; A.M. Al-Jibouri; K.K. Al-Janabi; and I.I. Muhammed. 2000. Production of new Sunflower (*Helianthus annuus* L.) single crosses for central and northern regions of Iraq. Dirasat, Agric. Sci., 27(3) : 481-488.
28. **Yousif, D.P.**; A.Kh. Abass; N.M. Saead; and Th. Kh. Ibrahim. 2000. Comparison study of different exotic and commercial varieties of sunflower. Dyala J. Sci. Educat. Res., 1(9): 135-144.
29. Al-Jibouri, A.A.M; K.K. Al-Janabi; **D.P. Yousif**; I.M. Ghalib; and M.A. Al-Sudani. 2000. Breeding of introduced genotypes of wheat (*Triticum aestivum* L.) for yield and diseases resistance. 2nd Arab Gong. Genet. And Biotech. Minia Univ., Nov. 23-26, 2000, Egypt.
30. Al-Jibouri, A.A.M.; K.A. Gadooa; K.K. Al-Janabi; **D.P. Yousif**; I.M. Ghalib; and M.A. Al-Sudani. 2000. Production of two bread wheat cultivars for irrigated lands of Iraq. J. Arab Agric. Res., 4(2): 178-197.

31. **Yousif, D.P.** 2001. Maize breeding for drought tolerance to deduce elite varieties for marginal environments. *J. Agric. and Develop. Arab Nat.* 20(2): 41-55.
32. **Yousif, D.P.;** and K.K. Abass. 2001. The role of genetic diversity and germplasm exchange in cereal breeding and breaking the barriers of yield potential. *J. Agric. and Develop. Arab Nat.* 20(2): 16-30.
33. **Yousif, D.P.;** K.K. Abass, A.H. Majeed, A.M. Al-Jibouri, J.N. Mahmoud and M.A. Aied. 2001. Breeding to deduce a new maize (*Zea mays* L.) variety suitable for fall season of Iraq. *Dirasat "Agric. Sci."* 28(2,3): 261-271.
34. Mohammed, L.S.; **D.P. Yousif**; and K.K. Al-Janabi. 2001. Heritability studies for yield and some of its components by hybridization between mutants and varieties of bread wheat. *Dyala J. Sci. Educ. Res.*, 1(10): 253-262.
35. Al-Janabi, K.K.; I.M. Al-Marroof; and **D.P. Yousif**. 2001. Introduction of bread and durum wheat, tritical, and barley genotypes to deduce cultivars suitable for Iraq environment. *J. Tech. Res.*, 76(14): 124-136.
36. **Yousif, D.P.;** J.N. Mahmoud; and A.H. Majeed. 2002. Effect of plant density and two popcorn (*Zea mays* L. everta) varieties on yield, and its components. *Iraqi J. Agric.* 7(7): 12-21.
37. **Yousif, D.P.;** H.Ch. Ali; and R.H. Baker. 2003. Estimation of heterosis and combining ability in local Maize inbred lines. *Dirasat "Agric. Sci."* 30: 246-259.
38. **Yousif, D.P.;** H.Ch. Ali; and R.H. Baker. 2002. Estimation of heritability and degree of dominance for some traits of Maize (*Zea Mays* L.) inbred lines. *Mu'tta J.* 17(3) 27- 38.
39. **Yousif, D.P.;** M.S. Na'om; L.I. Mohammed; and A.Kh. Abass. 2002. Comparison of exotic maize hybrids and local variety (Al-Rabee) under two plant densities. *J. Tech. Res.* (In press).
40. **Yousif, D.P.;** and Sh.A. Yousif. 2003. Sensitivity of cereals reproductive phase to drought. (Unpublished).

41. **Yousif, D.P.** 2003. Favism caused by *Vicia faba* L. and how to constraint it's dangerous. (Unpublished).
42. **Yousif, D.P.;** M.S. Na'om; A. Kh. Abass; and L.I. Mohammed. 2005. Breeding and evaluation of open pollinated variety of sunflower (*Helianthus annuus* L.). Iraqi J. Science. & Technology 2:76- 86.
43. **Yousif, D.P.** 2005. Breeding of cereal crops to develop drought tolerance. J. Agric. and Develop. Arab Nat. 24(2): 7-19.
44. **Yousif, D.P.;** R.H. Baker; H.Ch. Ali; A.H. Majeed; and J.N. Mahmmoud. 2006. Utilization of heterosis and combining ability in maize hybrids breeding. Iraqi J. Agric. 11(2)157-166.
45. **Yousif, D.P.;** M.S. Na'om; A. Kh. Abass; and L.I. Mohammed. 2006. Production and evaluation of maize to deduce double crosses. Dirasat "Agric. Sci." 33(2)59-70.
46. **Yousif, D. P.;** A. S. Hekmat; M. I. Al-Saffar. 2006. Gene action and heterosis for grain yield and ear traits of local and introduced genotypes of maize. J. Tikrit Univ. Agric. Sci. 6 (3) 275-284.
47. Al-Janabi, K.K.; **D. P. Yousif;** A.A. Nefal; A.R. Abbass; and A.M. Hayder. 2007. Comparison of yield, its components, and other agronomic traits of different exotic durum wheat cultivars. Al- Anbar J. Agric. Sci. 5(1)125-135.
48. Al-Janabi, K. K.; **D. P. Yousif;** A. M. Hayder; A. A. Nefal; A. R. Abbass; A. S. Hekmat. 2006. Evaluation of exotic and indigenous durum wheat accessions for grain yield and other traits in Baghdad plain. 10th Scientific Conf. for Foundation of Technical Education. March 28-29, 2007. Baghdad, Iraq.
49. Yousif, Sh. Aied; **D. P. Yousif;** and A. A. Kasim, A. S. Hadi. 2007. Genetic behavior and heterosis for some growth traits of local bread wheat cultivars. 6th Scientific Conf., Ministry of Agric. Oct. 7-9, 2007. Special Issue, J. Iraqi Agric.12(2)6-12.
50. AL- Salihi A. A. M.; **Yousif, D. P.;** AL- Kaabe, E. A. K. ; AL- Hussainy, Z. A. 2007. Maize breeding for drought tolerance through *in vitro* mutagenesis. JUNS, J. Univ. Alnahrain of Sci. 10(2)77-82.
51. **Yousif, D. P.** 2007. Breeding and evaluation of maize synthetic varieties by combining of empirical double crosses. 6th Agric. Scientific Conf. of the Univ. of Jordan. April 9-12, 2007. Amman, Jordan.

52. **D. P. Yousif**; Al-Janabi, K. K.; A. M. Hayder; A. A. Nefal; and A. R. Abbass. 2008. Studying yield potential and genotype-environment interaction analysis of grain yield for different durum (*Triticum turgidum* var durum) cultivars. (Unpublished).
53. **D. P. Yousif**; Sh.A Yousif; R. Jassim; and Q. K. Abd. 2008. Estimation of some genetic parameters in wheat (*Triticum aestivum* L.) breeding (Unpublished).
54. Yousif, Sh.A.; **D. P. Yousif**. 2008. Genetic Control of Callus Induction and Plant Regeneration in Spring Wheat (*Triticum aestivum* L.) Cultivars. (Unpublished).
55. **D. P. Yousif**. 2008. Maize breeding for drought tolerance in Iraq. (Unpublished).
56. Mahmoud, J. N.; **D. P. Yousif**; M. I. ALSaffar; and A. S. Hekmat. 2008. Estimating of general combining ability for 108 S₃ topcrosses of corn (*Zea mays* L). (Unpublished).
57. Al-Dulaimi, A. H.; **D. P. Yousif**; H. Kh. Khirbet. 2008. Estimation of Combining Ability Among Local and Introduced Maize Genotypes. (Unpublished).