

( )

//

(*Cicer arietinum* L.)

ILC

Archive of SID

)

(

/

/

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( ) ( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

Archive of SID

Archive of SID

( ) ( ) ( )

( ) ( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

( )

ILC

( )

( )

)

( )

(

ILC

ILC482 )

ILC

)

(

( )

( )







LSD

ILC

(.)

( )

/ a	/ b	/ a	/ a	
/ a	/ a	/ a	/ b	ILC
/ A	/ b	/ b	/ a	

LSD ( / ) = /

( )

(

( )

ILC

( )

( )

( )

( )

( )

( )

( )

( )

Archive of SID

( )

( )

ILC

x

( )

( )

( )

( )

( )

( )

( )

( )

( / )

( / )

( )

( )

( )

)



Archive of SID

**REFERENCES**

( )  
( )  
( )

ILC482

(*Cicer arietinum*)

( )

(*Cicer arietinum*)

( )

15. Alarcon, R., C. Lacasta & T. Simorte. 1998. Winter chickpea versus spring chickpea. 3<sup>rd</sup> European Conference on Grain Legumes, Valladolid, Spain.
16. Albett, C. R., G. C. Schleihauf & A. D. McLaren. 1984. Effect of row width and population on soybean yield in southwestern Ontario. *Can. J Plant Sci.* 64: 9-15.
17. Anonymous. 1976. Annual Report of 1975 on Grain Legumes. Tehran University, School of Agriculture, Karaj, Iran.
18. Ayaz, S., D. L. McNeil, B. A. Mekenzie & G. D. Hill. 1999. Population and sowing depth effects on yield components of grain legumes. *Proc. Agron. Sci.* 29: 9-15.
19. Bennet, J. P., M. W. Adams & C. Burga. 1977. Pod yield component variation and intercorrelation in *Phaseolus vulgaris* as affected by planting density. *Crop Sci.* 17: 73-75.
20. Boquet, D. J. 1990. Plant population density and row spacing effects on soybean at post-optimal planting dates. *Agron. J.* 82: 54-64.
21. Boquet, D. J., K. L. Koonce & D. M. Walker. 1982. Selected determinate soybean cultivars yield responses to row space and planting dates. *Agron. J.* 74: 136-138.
22. Brath Waite, R. I. 1982. Bodie bean responses to changes in plant density. *Agron. J.* 74: 593-6.
23. Brinsmead, R. B., P. R. Thompson & W. D. Martin. 1996. A chickpea cultivar x population x row space study in southern Queensland. Proceeding of the 8<sup>th</sup> Australian Agronomy Conference, Toowoomba.
24. Compiglia E., R. Mancinelli, P. Crino, P. Vitale & F. Saccardo. 1998. Agronomical management of winter chickpeas (*C. arietinum*) in Italy. 3<sup>rd</sup> European Conference on Grain Legumes. Valladolid, Spain.
25. Dahan R., J. Kirby and S. P. S. Beniwal. 1998. Dual season chickpea development for wide adaptation and stable yield. 3<sup>rd</sup> European Conference on Grain Legumes. Valladolid, Spain.
26. Dasberg, S. & J. W. Bakker. 1970. Characterizing soil aeration under changing soil moisture conditions for bean growth. *Agron. J.* 62: 689-692.
27. Dhinyra, K. K., M. C. Dhillon & D. S. Grewal. 1986. Effect of plant population and row spacing on light interception and grain yield of chickpea under late sown condition. *Int. Tropic. Agric.* 6: 245-250.
28. Dominguez, C. & D. J. Hume. 1978. Flowering, abortion and yield of early maturing soybean at three densities. *Agron. J.* 70: 801-805.
29. Doss, B. D. & D. L. Thurlow. 1974. Irrigation, row width and plant population in relation to growth characteristics of two soybean varieties. *Agron. J.* 66: 620-623.
30. Elmor, W. E. 1991. Soybean cultivars response to planting rate and tillage. *Agron. J.* 82: 829-32.
31. Ersking, W. & T. N. Khan. 1976. Effects of spacing on cowpea genotypes in Papa New Guinea. *Expl. Agric.* 12: 401-410.
32. Evans, J. & G. E. Oconnor. 1998. The contribution of grain legumes to the nitrogen economy of cereal production in Southern Australia. 3<sup>rd</sup> European Conference on Grain Legumes. Valladolid, Spain.
33. Hebert, S. J. & F. D. Baggerman. 1983. Cowpea response to row width, density and irrigation. *Agron. J.* 75: 982-986.
34. Iliadis, C. G. 1998. Chickpea seed yield increase by autumn sowing. 3<sup>rd</sup> European Conference on Grain Legumes. Valladolid, Spain.
35. Jensen E. S. 1987. Seasonal patterns of growth and nitrogen fixation in field-grown pea. *Plant and Soil* 101: 29-37.
36. Kamel, M. C., E. A. Mahmoud & M. Z. Hassan. 1978. Effect of plant density on growth attributes of two Egyptian chickpea varieties. *Research Bulletin* 69.

37. Khan H. R., G. K. McDonald & Z. Rengel. 1998. Assessment of the Zn status of chickpea by plant analysis. *Plant and soil* 198: 1-9.
38. Khanna–Chopra, R. & S. K. Sinha. 1988. What limits the yield of pulses? Plant process or plant type. P 68-278, in Sinha, S. K., P. V. Sane, S. E. Bhargara and P. R. Agrawal (eds.), *Proceeding of the International Congress of Plant Physiology, Society for Plant Physiology and Biochemistry*, New Delhi, India.
39. Korte, L. L., J. H. Williams, T. E. Spechtand & R.C. Sorensen. 1983. Irrigation of soybean genotypes during reproductive ontogeny. I–Agronomic responses. *Crop Sci.* 23: 521-522.
40. Leport, L., S. L. Davies, N. C. Turner, R. J. French, K. A. Shacke & H. M. Siddique. 1998. Physiological tools aid in understanding chickpea adaptation to low-rainfall Mediterranean–type environment. 3rd European Conference on Grain Legumes. Valladolid, Spain.
41. Lopez–Bellido, L. 1998. Role of grain legumes in Mediterranean agricultural systems. 3rd European Conference on Grain Legumes. Valladolid, Spain.
42. Lueschen, W. E. & D. R. Hicks. 1977. Influence of plant population on field performance of three soybean cultivars. *Agron.J.* 69: 390-393.
43. Miller, R. W. & R. L. Donahue. 1990. *Soils–An Introduction to Soil and Plant Growth* ( 6th ED.). Prentice – Hall International, Inc., Englewood Cliffs, NJ, USA.
44. Muehlbauer, F. J. & A. Tullu. 1997. *Cicer arietinum*. WWW. Hort. Purdue/ edu/new crop/nexus/*Cicer arietinum*.
45. Ramseur, E. L., S. U. Wallace & V. L. Quisenberry. 1985. Growth of Broxton soybean as influenced by irrigation and intrarow spacing. *Agron. J.* 77: 163-8.
46. Ramteke, S. D., M. B. Chetti & M. Salimath. 1998. Seasonal variation in yield and yield components in gram (*Cicer arietinum*). *Indian J. Agric. Sci.* 68: 251-254.
47. Savoy, B. R., J. T. Cothorn & C. R. Shumway. 1992. Early season production systems utilizing indeterminate soybean. *Agron. J.* 84: 394-398.
48. Siddique, K. H. M. 1984. Effect of plant density on growth and harvest index of branches in chickpea. *Field Crop Research.* 9: 193-203.
49. Silim, S. N. & M. C. Saxena. 1993. Adaptation of spring–sown chickpea to the Mediterranean Basin. I–Response to moisture supply. *Field Crop Research.* 34: 121-136.
50. Singh, A. 1988. Effect of plant type and population density on growth and yield of chickpea. *J. Agric. Sci.* 110: 10-110.
51. Singh, V. & L. S. Bhushan. 1980. Water use efficiency and yield of dryland chickpea as influenced by fertilization and stored soil water and season rainfall. *Agric. Water Management* 2: 299-305.
52. Singh, J., K. P. Singh, O. P. Mehta & R. S. Malik. 1991. Seasonal consumptive use, moisture extraction pattern and water use efficiency of Kabuli gram (*Cicer arietinum*) cultivars under different levels of irrigation. *Agric. Digest.* 11: 142-144.
53. Sumerfield, R. T. & E. H. Roberts. 1985. *Grain Legume Crops. Mackys of Chatham, Kent, London.* PP 312-381.
54. Yadav, S. D., K. Chander & A. Kumar. 1994. Response of late–sown gram (*Cicer arietinum*) to irrigation and phosphorous. *Indian J. Agric. Sci.* 64: 24-28.