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*(Cicer arietinum L.)*

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(FAO, 2001)

*(Cicer arietinum L.)*

(Jahad-Agriculture, 2004)

(Lees, 2004)

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(Lees, 2004; Vandermasen, 1987)  
(Ozdemir & Karadavut, 2003)  
(1987) Calcagno et al.  
(1997) Singh et al. . (Saxena et al., 1988)  
(ICARDA, 1981) ( )  
(2001) Iliadis  
(Plancqaert et al., 1990)  
(Ozdemir & Karadavut, 2003)  
(Kanoni, 2004) (Mckay et al., 2002)  
(Solh & Pala, 1990)  
(1984) Hawtin & Singh .  
(1996) Mishra et al. (ICARDA, 1985)  
(ICARDA, 1982, 1986)  
(Calcagno et al., 1987)  
(ICARDA, 1986)

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(*Carthamus oxyacantha*)

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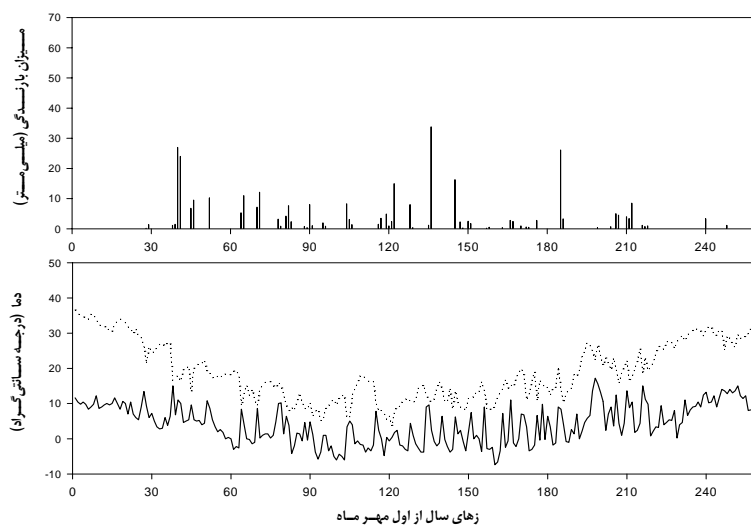
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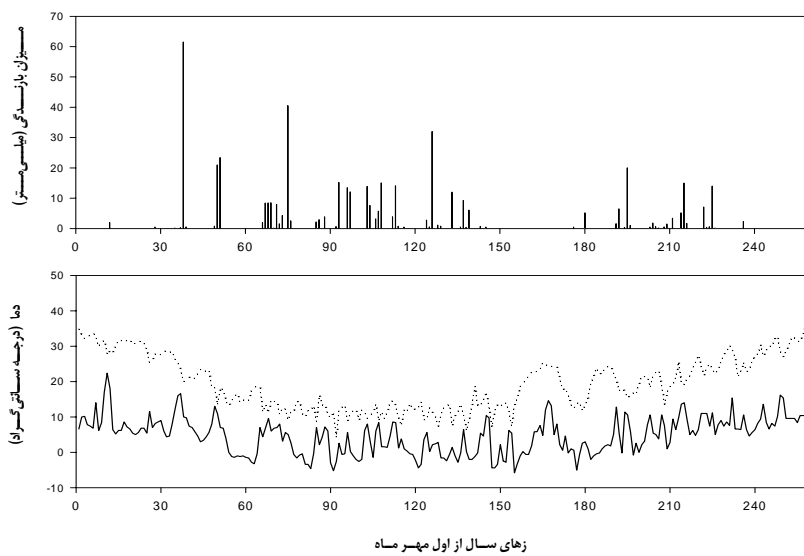
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(Radmehr et al., 1997)

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(2003) Regan et al. .

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(1999) Jettner et al.

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(2003) Ehsanzade .( )

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(1981) Ahlawat et al. ( )

(2004) Jafarzade ( ) × ×

(1976) Saxena et al. ( )

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ILC (Singh et al., 1997)  
 (2003) Ozdemir, and Karadavut  
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 / (Ozdemir & Karadavut, 2003)  
 / (Plancqaert et al., 1990;Saxena,  
 / 1984; Wery, 1986)

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(2003) Ehsanzade .

.(Ehsanzade, 2003)

.(Radmehr et al., 1997)

.(Ozdemir & Karadavut, 2003)

.(Leport et al., 1999)

.(Iliadis, 1998)

.(Ozdemir & Karadavut, 2003)

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(2003) Ehsanzade

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(Yadav et al., 1994)

(R= / )

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(Filippeti, 1990; Singh & Dixit,

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.1992)

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(Plancqaert et al., 1990; Wery, 1986)

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Regan et al. (Plancqaert et al., 1990; Wery, 1986)

(2003) Porsa et al. .

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(2003) Porsa et al. .

(1997) Singh et al.

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(Leport, 1999)

(Jafarzade, 2004)

(2003) Regan et al. ( )

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(Lees, 2004)

## REFERENCES

1. Ahlawat, I. P. S., Singh, A. & Saraf, C. S. (1981). It pays to control weeds in pulses. *Indian Farming*, 31, 11-13.
2. Calcagno, F., Gallo, G., Venora, G. & Restuccia, G. (1987). Primi risultati di ricerche sperimentali sul diserbo chimico del cece. In La Coltura Del Cece in Italia. In: Solh, M.B., and M. Pala., *Weed control in chickpea*. Options Mediterranennes-serie Seminars-No. 9, 93-99. CIHEAM-Options Mediterranennes. <http://ressources.ciheam.org>
3. Ehsanzade, P. (2003). Influence of varing plant densities and two sowing methods on yield and yield components of four varieties of chickpea (*Cicer arietinum* L.) under dryland condition in AliGoodarz, Lorestan. *Agricultural Science of Tabriz*, 13 (3), 14-30. (In Farsi).
4. FAO. (2001). *Food and Agriculture Organization of the United Nations*. FOASTAT database. <http://www.fao.org>
5. Filippeti, A. (1990). Variability of plant and seed characteristics in a collection of chickpea. *Legume Res*, 13, 39-46.
6. Goldani, M., Bagheri, A. & Nezami, A. (2000). Effects of planting date on yield and yield components of chickpea under condition of Mashhad. *J Agric Sci Natur Ressour*, 7 (1), 23-33. (In Farsi).
7. Hawtin, G. G. & Singh, K. B. (1984). Prospects and potential of winter sowing of chickpea in Mediterranean region. P.7-16. In: M. C. Saxena, and K. B. Singh (eds.) *Ascochyta Blight and Winter Sowing of Chickpeas*. The Netherlands.
8. ICARDA (International Center for Agricultural Research in the Dry Area-Farming System Program) (1981 - 1987): *Annual Reports*. Aleppo, Syria.
9. Iliadis, C. (2001). Evaluation of six chickpea varieties for seed yield under autumn and spring sowing . *J Agric Sci Cambridge*, 137, 439-444.

10. Iliadis, C. G. (1998). *Chickpea seed yield increase by autumn sowing*. In: Proceedings of 3<sup>rd</sup> European Conference on Grain Legumes. Valladolid, Spain.
11. Jafarzade, N. (2004). Evaluation of mechanical and chemical control of chickpea weeds in the Entezary planting. In: Proceedings of 3<sup>rd</sup> National Conference on the Development in the Application of Biological Products and Optimum Utilization of Chemical Fertilizers and Pesticides in Agriculture. P: 626-627. (In Farsi).
12. Jahad-Agriculture. (2004). *Data of Jahad-Agriculture Minstry*. <http://www.agri-jahad.ir>
13. Jettner, R. J., Siddique, K. H. M., Loss, S. P. & French, R. J. (1999). Optimum plant density of desi chickpea (*Cicer arietinum*) increases with increasing yield potential in south-western Australia. *Aust J Agric Res*, 50, 1017-1025.
14. Kanoni, H. (2004). Study of cold tolerance in chickpea (*Cicer arietinum* L.) genotypes in fall-sown nurseries. *Seed and Plant J*, 20 (1), 89-99. (In Farsi).
15. Lees, B. (2004). *Weed control in chickpea, an Alberta perspective*. Internet.
16. Leport, L., Turner, N. C., French, R. J., Barr, M. D., Duda, R., Davies, S. L., Tennant, D. & Siddique, K. H. M. (1999). Physiological responses of chickpea genotypes to terminal drought in a Mediterranean-type environment. *European J Aron*, 11, 279-291.
17. Mayers, J. D., Lawn, R. J. & Byth, D. E. (1991). Agronomic studies on soybean on the dry season of tropic. I: Limits on yield imposed by phenology. *Aust J Res*, 42, 1057-1092.
18. Mckay, K., Miller, P., Jenks, B., Riesselman, J., Neill, K., Buschena, D. & Bussan, A. J. (2002). *Growing chickpea in the northern Great Plains*. North Dakota State University. <http://www.ag.ndsu.edu/pubs/plantsci/crops/a1236w.htm>
19. Mishra, J. S., Sing, V. P. & Bhman, V. M. (1996). Response of lentil to date of sowing and weed control in Jabalpur, India. *Lens Newsletter*, 23 (1, 2), 18-23.
20. Ozdemir, S. & Karadavut, U. (2003). Comparison of the Performance of autumn and spring sowing of chickpea in a temperate region. *Turk J Agric*, 27, 345-352.
21. Ozdemir, S., Karadavut, U. & Erdogan, C. (1999). Stability analysis of some winter sown chickpea cultivars in east Mediterranean region. *Turk J Agric*, 23, 201-205.
22. Plancqaert, PH., Braun, PH. & Wery, J. (1990). *Agronomic studies on chickpea (Cicer arietinum)*. Options Mediterraneennes-serie seminaries. No. 9: 87-92. CIHEAM-Options Mediterraneennes. <http://www.ressources.ciheam.org>.
23. Porsa, H., Nezami, A., Bagheri, A., Mohammad abadi, A. A. & Rastegar, J. (2003). Effects of fall and winter planting dates on morphological characteristics, yield and yield components of chickpea under irrigated condition of khorasan (Nishabur). *J Agric Sci Natur Ressour*, 10 (2), 51-64. (In Farsi).
24. Radmehr, M., Lotfali-aeneh, G. & Kajbaf, A. (1997). Effect of sowing date on growth and yield of wheat cultivar Falat in southern reagon of Khuzestan. *Seed and Plant J*, 13 (2), 22-33. (In Farsi).
25. Regan, K. L., Siddique, K. H. M. & Martin, L. D. (2003). Response of kabuli chickpea (*Cicer arietinum*) to sowing rate in Mediterranean-type environments of south-western Australia. *Australian J of Experimental Agriculture*, 43, 87-97.
26. Saxena M. C., Subramniyam, K. K. & Yadav, D. S. (1976). Chemical and mechanical control of weeds in gram. *Pantnagar Journal of Research*, 1, 112-116.
27. Saxena, M. C. (1984). Agronomic studies on winter chickpeas. In: M. C. Saxena and K. B. Singh. *Ascochyta Blight and Winter Sowing of Chickpeas*. PP. 123-139. Martinus Nijhoff/Dr. W. Junk Publishers, the Hague, the Nether lands.
28. Saxena, M. C., Saxena, N. P. & Mohamad, A. K. (1988). High temperature stress. In: R.J. Summer field. *world crops: Cool Season Food Legumes*. PP. 845-856. Kluwer Academic Publishers, The Netherlands.
29. Singh, K. B., Malhotra, R. S. & Saxena, M. C. (1989). Chickpea evaluation for cold tolerance under field condition. *Crop Sci*, 29, 282-285.
30. Singh, K. B., Malhotra, R. S., Saxena, M. C. & Bejiga, G. (1997). Superiority of winter sowing over traditional spring sowing of chickpea in the Mediterranean region. *Agron J*, 89, 112-1180.
31. Singh, V. K. & Dixit, R. S. (1992). Effect of moisture regime and sowing date on chickpea (*Cicer arietinum*). *Indian J Agron*, 37, 739-743.
32. Solh, M. B. & Pala, M. (1990). Weed control in chickpea. Options Mediterraneennes-serie seminaries - No. 9:93-99. CIHEAM-Options Mediterraneennes. <http://ressources.ciheam.org>
33. Vandermasen, L. J. G. (1987). Origin, history and taxonomy of chickpea. In: Saxena, M. C. and Singh, K. B. *The Chickpea*. C.A.B. International, Oxon, U.K.
34. Wery, J. (1986). Un pois pas si chiche que cela. *Bulletin FNAMS Semences* 97: 32-35. In: Plancqaert, PH., PH. Braun, and J. Wery. (1990). *Agronomic studies on chickpea (Cicer arietinum)*. Options Mediterraneennes-Serie seminaries. No. 9: 87-92. CIHEAM-Options Mediterraneennes. <http://www.ressources.ciheam.org>
35. Yadav, S. D., Chander, K. & Kumar, A. (1994). Response of late-sown gram (*Cicer arietinum*) to irrigation and phosphorous. *Indian J Agric Sci*, 64, 24-28.