

()

*

(/ / : / / :)

()

(SSS)

(GGG) (CCC)

;(CSG)

;(CSC)

;(GSG)

;(GSS)

(CSS)

(P≤0.05)

(SSS)

()

(CSG)

()

(GGG CCC)

(P≤0.05)

GSS CSS

(%)

(SSS)

(% /)

(% /) CSG

(CSG)

CSG GSS CSS

)

()

)

(: :)

(/ =

:

(Lesoing & Francis, 1999)

(Kowal & Kassam, 1978)

(Chapko, 1991)

(Vandermmer, 1992)

(Wells & Faden, 1991)

(Banik et al., 2006)

(Giller & Wilson, 1991)

(Jeyabal & Kuppuswamy, 2001)

(KFS₂)

(Cruse, 1992)

(SSS)

() (p ≤ 0.01)

() (GSS & CSS)

()

()

(1992) West & Griffith (2004) Ross et al.

()

(Chapko et al., 1991)

() (2003) Zhongmin & Guang .

()

(CSS) (2003) Tsuoba & Walker .

(GSS)

GSG CSC Li et al. .

(2001)

(CSG) / Lesoing & .

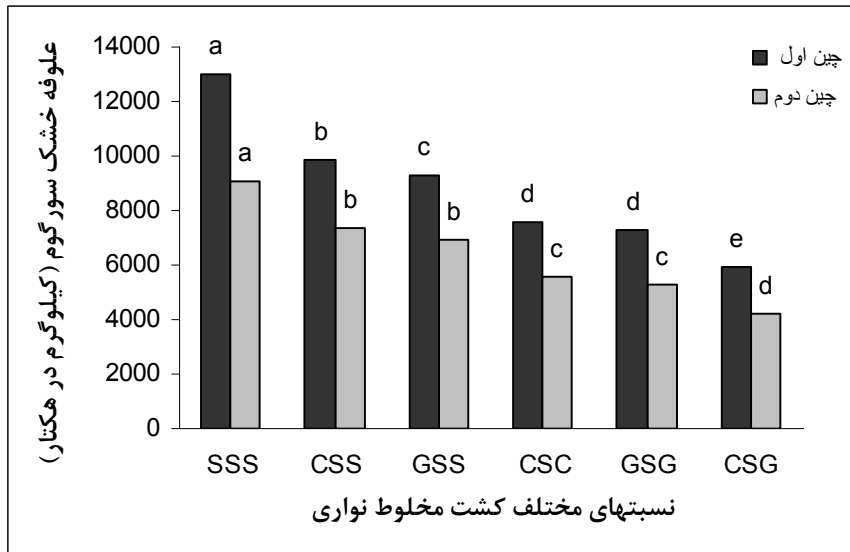
(1999) Francis

()

()

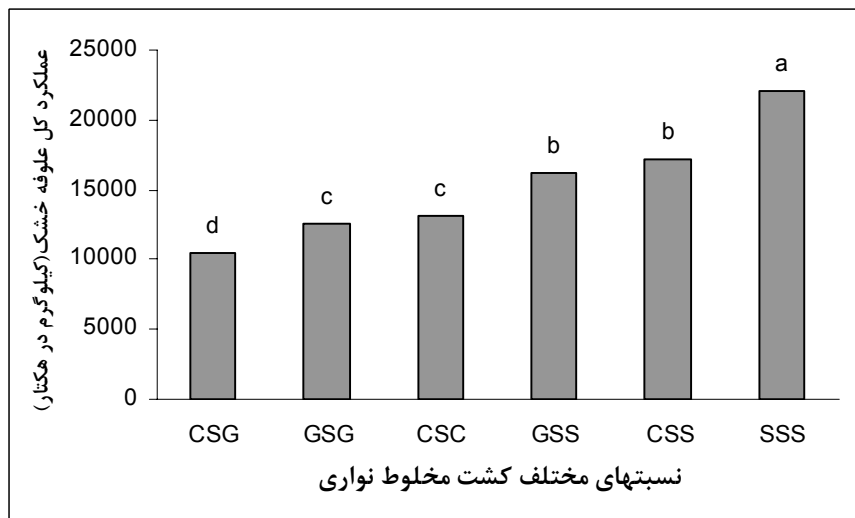
/	/	/
/ **	/ **	/ **
/	/	/

% ***



G C S ()

%



G C S ()

%

(CSS) :
 () (GSS) :
 (p ≤ 0.01) ()
 .. ()
 (: :)

() (: :)

(2004) Ross et al. .

(1991) Sistachs & Singh .

(1992) Sood & Sharma

()	()	()	
/ a	/ e	/ ab	()
/ b	/ d	/ a	(:) :
/ ab	/ d	/ a	(:) :
/ d	/ a	/ b	(: :) :
/ c	/ c	/ c	(: :) :
/ bc	/ b	/ c	(: :) :

(: :)

(:) (SSS)

()

()

LER

()

(1991) Sistachs & Singh

LER				®
	/ a	/ a		SSS
a	/ a			CCC
	/ b	/ c	/	GCG
/ b	/ b	/ c	/	GSG
	/ b	/ b	/	CSS
/ b	/ b	/ b	/	GSS
/ b	/ b	/ d	/	CSG
G C ,S				®

(:) :

(: :) :

Allen & Obura

(:)
(1984)

(LER¹)

(Banik et al., 2006)

()

)

(GSS)

1. Land Equivalent Ratio

Abd & Lateef

(1993)

(2003) Maffei & Mucciarelli

(LER= /)

()

REFERENCES

1. Abd, E. L. & Lateef, E. M. (1993). Soybean varital tolerance to intercropping with semi-dwarf grain sorghum. *Egyptian J Physiol Sci*, 17(2), 287-295.
2. Allen, J. R. & Obura, R. K. (1984). Yield of corn, cowpea, and soybean under different intercropping systems. *Agron J*, 75, 1005-1009.
3. Banik, P., Midya, A., Sarkar, B. K. & Ghose, S. S. (2006). Wheat and chickpea intercropping systems in an additive series experiment: Advantages and weed smothering. *Euro J Agron*, 24 (4), 325-332.
4. Chapko, L. B., Brinkman, M. A. & Albrecht, K. A. (1991). Oat, oat-pea, barley, and barley-pea for forage yield, forage quality, and alfalfa establishment. *J Prod Agric*, 4, 486-491.
5. Cruse, R. M. (1992). *Strip intercropping systems*. Leopold Center Progress Report, (Vol)., 1: 43-45. WWW.leopold.iastate.edu/.
6. Giller, K. E. & Wilson, K. J. (1991). *Nitrogen fixation and tropical cropping systems*. CAB International, Wallingford, pp.10-120.
7. Jafari, A., Connolly, V., Frolich, A. & Walsh, E. K. (2003). A note on estimation of quality in perennial ryegrass by near infrared spectroscopy. *Irish J of Agricultural and Food Research*, 42, 293-299.
8. Jeyabal, A. & Kuppaswamy, G. (2001). Recycling of organic wastes for the production of vermi compost and its response in rice-legume cropping system and soil fertility. *Euro J Agron*, 15, 153-170.
9. Kowal, J. M. & Kassam, H. (1978). *Agricultural ecology of savanna*. Oxford: Clarendon Press, 403 pp.

10. Lesoing, G. W. & Francis, C. A. (1999). Strip intercropping effect on yield and yield components of corn, grain sorghum, and soybean. *Agron J*, 91, 807-813.
11. Li, L., Sun, J., Zhang, F., Li, X., Rengel, Z. & Yand, S. (2001). *Wheat/ maize or wheat/soybean strip intercropping II*. Recovery or compensation of maize and soybean after wheat harvesting. <http://www.sciencedirect.com>.
12. Maffei, M. & Mucciarelli, M. (2003). *Essential oil yield in peppermint/soybean strip intercropping*. <http://www.sciencedirect.com>.
13. Mohta, N. K., & De, R. (1980). Intercropping maize and sorghum with soybeans. *J Agric Sci (Cambridge)*, 95, 117-122.
14. Ross, S. M., King, J. R., O'Donovan, J. T. & Spaner, D. (2004). Intercropping berseem clover with barley and oat cultivars for forage. *Agron J*, 96, 1719-1729.
15. Sistachs, M. & Singh, L. (1991). Intercropping of forage sorghum, maize and soybean during establishment of different grasses in a montmorillonitic soil. II. Guinea grass (*Panicum maximum*). *Cuban J Agricultural Sci*, 25(1), 83-87.
16. Sood, B. R. & Sharma, V. K. (1992). Effect of nitrogen level on the yield and quality of forage sorghum intercropping with legumes. *Indian J Agron*, 37(4), 642-644.
17. Sullivan, P. (2001). Intercropping principles and production practices. <http://www.attra.org/attra-pub/intercrop.html>.
18. Tsuoba, M. & Walker, S. (2003). Shade effect on *Phaseolus vulgaris* L. intercropped with *Zea mays* L. under well-watered conditions. *J Agronomy & Crop Sci*, 190, 168-176.
19. Vandermeer, J. (1992). *The Ecology of Intercropping*. Great Britain at the University Press. Cambridge.
20. Wells, R. & Faden, M. (1991). Soybean growth response to plant density. Relationships among canopy photosynthesis, leaf area and light interception. *Crop Sci*, 31, 805-810.
21. West, T. D. & Griffith, D. R. (1992). Effect of strip intercropping corn and soybean on yield and profit. *J Prod Agric*, 5, 107-110.
22. Zhongmin, L. & Guang, W. (2003). Row – ratios and plant density in potato/maize strip cropping. *Field Crops Research J*, 25, 51-59.