

Responses of harvest index and other agronomic traits to selection for high and low harvest index in rice¹

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summary

Responses to selection for high and low harvest indices were studied in the rice cross of Kaohsiung sen 7 x Pai-kuo-chin-yu. Selection of F₃ plants proved effective producing effects on F₄ progenies. Lines selected for higher harvest index tended to give higher grain yield, more spikelets per panicle and higher fertility and showed a height reduction and earliness of maturity. The heritability estimate for harvest index obtained in this experiment was quite high (64.3 %), suggesting that in segregating populations selection for higher harvest index could be effective in breeding programs, if parental germplasms were chosen properly.

(Key words: Rice, Harvest index, Selection)

¹. Research article No.49 of Hualien District Agricultural Improvement station.

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