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(Vitis vinifer L.)

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$$Y = \mu + G + P_e + GY + \varepsilon$$

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= GY

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$$\text{Heritability} = \frac{G}{(G + P_e + GY + \varepsilon)}$$

(cm)	(cm)	(gr))	(cm ²)	(mg)	(mg)		()	()		
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$$\text{Repeatability} = \frac{G + GE}{G + GE + GY + \epsilon} (\quad) \quad \text{Heritability} = \frac{G}{G + GE + GY + \epsilon} (\quad) \quad \epsilon (\quad) \quad GY (\quad) \quad P_e (\quad) \quad G (\quad)$$

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REFERENCES

1. Alleweldt, G., P. Spiegel-Roy. & B. I. Reisch. 1990. Grapes (*Vitis*). pp: 291-337. In: Moore, J. & R. Ballington, Jr. (eds.). Genetic resources of temperate fruit and nut crops. Acta Hort. 290.
2. Barone, B., T. Caruso., F. P. Marra. & F. Sottile. 2000. Preliminary observation on some Sicilian pomegranate (*Punica granatum* L.) varieties. Options Mediterraneennes (42), pp: 137-140.
3. Bihamta, M. R. & M. R. Naghavi. 2003. Applied quantitative genetics. pp: 1-171. The university of Tehran publishing institute.
4. Christensen, L. P., M. L. Bianchi, C. D. Lynn, A. N. Kasimatis. & M. W. Miller. 1995. The effects of harvest date on Thompson seedless grapes and raisins. I. Fruit composition, characteristics, and yield. Am J Enol Vitic 46, pp: 10-16.
5. Ebadi, A., R. Fatahi. & M. R. Bihamta. 2005. Breeding grapevine to produce superior cultivars. National project report.
6. Eibach, R. 1990. Investigations about the influence of some physiological and phenological characteristics on quality and their heredity. Proc. 5th Intern. Symp. on Grape Breeding, St . Martin/Pfalz, 12-16 September 1989, 149-158.
7. Emershad, R. L. & D. W. Ramming. 1984. In- ovulo embryo culture of *Vitis vinifera* L. cv. Thompson seedless. Amer. J. Bot. 76, pp: 397-402.
8. Farsi, M. & M. Bagheri. 1999. Principles of plant breeding. pp: 1-259. Jahad Daneshgahi publishing company.
9. Fatahi, R., A. Ebadi., A. Vezvaei. & Z. Zamani. 2004. Relationship among quantitative and qualitative characters in 90 grapevine (*Vitis vinifera*) cultivars. Acta Hort 640, pp: 275-282.
10. Fatahi, R., A. Ebadi., M. R. Bihamta. & A. Vezvaei. 2000. Study of yield components in grape and efficiency of its pollen in fertilization. The thesis submitted for Master of Science degree in horticulture. The university of Tehran publishing institute.
11. I.B.P.G.R. 1983. Descriptors for Grapes. International Board Plant Genetic Resources. Rome.
12. Leao, P. C. D. S. & J. G. D. Costa. 2003. Estimates of repeatability and path coefficients on grape. Crop Breeding and Applied Biotechnology, Vol 3, pp: 231-236.
13. Mattheou, A., N. Stavropoulos. & S. Samaras. 1995. Studies on table grape germplasm grown in Northern Greece. II. Seedlessness, berry and must characteristics. Vitis 34 (4), pp: 217-220.
14. Mattheou, A., Stavropoulos, N. & S. Samaras. 1995. Studies on table grape germplasm grown in Northern Greece. I. Maturity time, bunch characteristics and yield. Vitis 34 (3), pp: 155-158.

15. Reisch, B. I. & C. Pratt. 1996. Grapes. pp: 297-369. In: J. Janick & J. N. Moore (eds.). Fruit breeding. Wiley, New York.
16. Riaz, S., A. Dolijez, R. J. Henry. & M. A. Walker. 2007. Grape. pp: 63-101. In: Kole, C. (eds). Genome mapping and molecular breeding in plants (Fruits and Nuts), Vol 4. Springer.
17. Saboor, M. & H. Elmi Gharvi. 1999. Genetics and its subjects (ed.). pp: 1-650. Fatemi publishing company.
18. Scienza, A., R. Miravelle, C. Visai. & M. Fregoni. 1978. Relationship between seed number, gibberellin and abscisic acid levels, and ripening in cabernet sauvignon grape berries. *Vitis* 17, pp: 361-368.
19. Valizade, M. & M. Moghaddam. 1999. An introduction to quantitative genetics. pp: 1-548. The university of Tehran publishing institute.
20. Widodo, S. E., Shiraishi, M. & S. Shiraishi. 1996. On the interpretation of °Brix value for the of Acid citrus. *J. Sci. Food Agric* 71, pp: 537-540.
21. Winkler, A. J. & W.O. Williams. 1936. Effect of seed development on the growth of grapes. *Proc Amer Soc Hort Sci* 33, pp: 430-434.
22. Winkler, A. J., J. A. Cook, W. M. Kliewer. & L. A. Lider. 1974. *General Viticulture*. University of California Press, Berkeley, USA.
23. Xianming, W., S. R. Sykes. & P. R. Clingeleffer. 2002. An investigation to estimate genetic parameters in CSIRO's table grape breeding program. 2. Quality characteristics. *Euphytica* 128, pp: 343-351.
24. Yazdi Samadi, B. & B. S. Tabatabaei. 2005. Basics of genetics. pp: 1-365. The university of Tehran publishing institute.