

LITERATURE CITED

- ABDULAHI, A. & VANDERLIP, R. L.**, 1972. Relationship of vigour tests and seed source and size to sorghum seedling establishment. *Agron. J.* **64** : 143 - 4.
- ABDULLAH, D. R., POWEL, A. A. & MATTHEWS, S.**, 1992. Prediction of the storage potential of long bean (*Vigna sesquipedalis L. Fruhw*) seed in the humid tropics. *Seed Sci. & Technol.*, **20** : 141 - 147.
- ACKERSON, R. C., KRIEG, D. R. & SUNG, J. M.**, 1980. Leaf conductance and osmoregulation of field-grown sorghum genotypes. *Crop Sci.* **20** : 10 -14
- ADAMS, J. E., ARKIN, G. F. & BURNETT, E.**, 1976. Narrow rows increase dryland grain sorghum yields. *Tex. Agric. Exp. Stn. Misc. Publ.* p. 1248. Cited in Myers & Foale (1980).
- AIAZZI, M. T., ARGUELLO, J. A. & DIRIENZO, J. A.**, 1998. Physiological maturity in seeds of *Atriplex cordobensis* (Gandogeret Stuckert) correlation with visual indicators. *Seed Sci. & Technol.*, **26** : 405 -411.
- ALMODARES, A., SEPALI, A., DALILOTOJJARY, H. & GHVAMI, R.**, 1994. Effect of phenological stages on biomass and carbohydrate contents of sweet sorghum cultivars. *Ann. of plant physiol.*, **8** : 42- 48.
- ALMODARES, A., SEPALI, A. & KARVE, A.D.**, 1994. Effect of planting date on yield and sugar production of sweet sorghum. *Ann. of plant physiol.* **8** : 49 -54.
- ANONYMOUS**, 1987. Department of Agricultural research Botswana. Annul Report.
- ANONYMOUS**, 1996. Lost crops of Africa. Vol. 1. Grains. Development national Research Council. National Academy Press. Washington, D. C.

ASSOCIATION OF OFFICIAL SEED ANALYSTS., 1983. Seed Vigour Testing Handbook. Contribution No 32 to the Handbook on Seed Testing, Association of Official Seed Analysts, N.E. USA, 88 p.

ASSOCIATION OF OFFICIAL SEED ANALYSTS., 1988. Rules for testing seeds. *J. Seed Technol.* **12** : 1 -117.

AYYANGAR, G. N. R. & RAO, V. P., 1931. Studies in sorghum. I. Anthesis and pollination. *Indian J. Agric. Sci.* **1** : 445 - 454.

BASKIN, C. C., PALIWAL, S. & DELOUCHE, J. C., 1989. Estimating field emergence of sorghum. 2nd International Seed Testing Congress Seed Symposium, *Abstracts of papers No 61:* ISTA, Zurich.

BENNETT, W. G., 1982. Alcohol production potential of four sorghums (Sorghum bicolor L. (Moench.) cultivars utilizing commercial and legume nitrogen. Masters Thesis. Dept. of Agron. Mississippi State Univ. P. 63. (In Soilean et. Al. 1985).

BEWLEY, J. D. & BLACK, M., 1986. Seed physiology of development and germination. Plenum Press, London, UK 367 p.

BISHNOI, U. R., 1974. Physiological maturity of seeds in *Triticale hexaploid* L. *Crop Sci.* **14** : 819 - 821.

BISHNOI, U. R. & DELOUCHE, J. C., 1975. Cottonseed quality and its relation to performance in laboratory and field tests. *Agron. Abst.* 90 p.

BOVEY, R. W. & McCARTHY, M. K., 1965. Effect of preharvest desiccation on grain sorghum. *Crop Sci.* **5** : 523-526.

BROADHEAD, D. M., 1969. Sugar production from sweet sorghum as affected by planting dates, after ripe harvesting and storage. *Agron. J.* **61** : 811-812.

BROADHEAD, D. M., 1972(a). Effect of stalk chopping on leaf removal and juice, quality of Rio sweet sorghum. *Agron. J.* **64** : 306 -308.

BROADHEAD, D. M., 1972(b) . Effect of planting date and maturity of Rio sweet sorghum. *Agron. J.* **64** : 389 -390.

BROADHEAD, D. M., 1973. Effect of deheading on stalk yield and juice quality of Rio sweet sorghum. *Crop. Sci.* **13** : 395 - 396.

BROADHEAD, D. M., FREEMAN, K. C., COLEMAN, O. H. & ZUMMO, N., 1974. New variety - this sweet sorghum looks good. *Mississippi Farm Research* **37 (5)**: 4,7.

BROADHEAD, D.M., STOKES, I.E. & FREEMAN, K.C., 1963. Sorgo spacing experiments in Mississippi. *Agron. J.* **55** : 164 – 166.

BRYAN, W. L., MOROE, R. L.& BASCHO, G. J., 1985. Evaluation of sweet sorghum for fuel alcohol. *ASAE Paper No 81-3571*, ASAE St. Joseph, MI 49085.

BYRD, H. W. & DELOUCHE, J. C., 1971. Deterioration of soybean seed in storage. *Proceedings of the Association of Official Seed Analysts*. **61** : 41 -57.

CADDEL, J. L. & WEIBEL, D. E., 1971. Effect of photoperiod and temperature on the development of sorghum. *Agron. J.* **63** : 799 - 803.

CLARK, R. B., 1982. Mineral nutritional factors reducing sorghum yields: micro-nutrients and acidity. *The Proceedings: ICRISAT*.

COLEMAN, O. H., 1970. Syrup and sugar from sweet sorghum. In Wall, J.S. & Ross, W.M. (Ed). *Sorghum production and utilization*. P. 416 - 440. AVI Publ. West port C.T.

COLEMAN, O. H., 1983. Syrup and sugar from sweet sorghum. Cover Title:Sugarcanes Pamphlets
USDA. Avi Publishing Company, Westport.

COLEMAN, R. E., 1970. Sweet sorghum for sugar production. *Proc. Am. Soc.of S. Cane. Technol.*
17: 1 - 9.

COLEMAN, R. E., 1972. Sweet sorghum for sugar production. Proc. Am. Soc. Sug. Cane technol.
17 : 1 - 9.

COLEMAN, O. H. & DEAN, J. L., 1964. Inheritance of resistance to methyl parathion in sorgo.
Crop Sci. **4** : 371-373.

COLEMAN, O. H. & STOKES I. E., 1958. The inheritance of weak stalk in sorgo. *Agron.J.* **50** :
119 - 120.

COLEMAN, O. H. & STOKES. I. E., 1964. Storage studies of sorgo. U.S. Dept. Agric. Bull 1307.

COWLEY, W. R., 1969. Sweet sorghum in South Texas : Yield potential and cultural practices. *J. Rio Grand Hort. Soc.* **23** : 157-162.

COWLEY, W. R. & LIME, B., 1976. In : "Fuels from sugar crops". Conf. Poc. (cited in Ferraris & Stewart, 1979).

COWLEY, W. R. & SMITH, B. A., 1972. Sweet sorghum as a potential sugar crop in south Texas.
Proc. Int. Soc. Sug. Cane Technol. **14** : 628 - 633.

DELOUCHE, J. C. & BASKIN, C. C., 1973. Accelerated Ageing techniques for predicting the relative storeability of seed lots. *Seed Sci.& Technol.* **1** : 117 -118.

DEMIR, I. & ELLIS, R. H., 1992(a). Changes in seed quality during seed development and maturation in tomato. *Seed Sci. Res.* **2** : 81-87.

DEMIR, I. & ELLIS, R. H., 1992(b). Development of pepper (*Capsicum annum*) seed quality. *Ann. Appl. Biol.* **121** : 385-399.

DOGGETT, H., 1970. Sorghum, 1st ed. Longmans, Green and Co. Ltd: London, Harlow.

DOGGETT, H., 1988. Sorghum, 2nd ed. Longmans, Green and Co. Ltd: London, Harlow.

DONALDSON, R. A. & VAN STADEN, J., 1989. A view of chemicals used ad ripeners of sugarcane in S.A. *Int. Soc. Sugarcane Technol. Proc.* **20** : 2 : 647 & 2 94655.

DOWNEY, L. A., 1971. Plant density yield relations in maize. *J. Aust. Instit. Agric. Sci.* **31** : 138 – 146.

EASTIN, J. D., 1972. Photosynthesis and translocation in relation to plant development. In N.G. P. Rao and L.R. House (ed) . Sorghum in the seventies. Oxford and IBH Publishing Co. New Delhi. 214 - 246.

EASTIN, J. D., HULTQUIST, J. H. & SULLIVAN, C. Y., 1973. Physiological maturity in grain sorghum. *Crop Sci.* **13** :175 - 178.

EILRICH, G. L., LONG, R. C., STICKLER, F. C. & PAULI, A. W., 1964. Stage of maturity, plant population and row width as factors affecting yield and chemical composition of atlas forage sorghum composition of atlas forage sorghum. *Kansas Agric. Exp. Stn. Tech. Bull.* 138.

ELLIS, R. H. & FILHO, P. A, C., 1992(a). The development of seed quality in spring and winter cultivars of barley and wheat. *Seed Sci. Res.* **2** : 9-15.

ELLIS, R. H. & FILHO, P. C., 1992(b). Seed development and cereal seed longevity. *Seed Sci. Res.* **2** :15-19.

ELLIS, R. H., HONG, T. D. & JACKSON, M. T., 1993. Seed production environment, time of harvest, and the potential longevity of seeds of three cultivars of rice (*O. sativa* L.). *Ann. of Bot.* **72** : 583 -590.

ELLIS, R. H., HONG, T. D. & ROBERTS, E. H., 1987. The development of desiccation toleration and maximum seed quality during seed maturation in six grain legumes. *Ann. of Bot.* **59** : 23-29.

FERRARIS, R., 1981(a). Early assessment of sweet sorghum as an agro-industrial crop. 1. Varietal evaluation. *Aust. J. Exp. Agric. Anim. Husb.* **21** : 75 - 82.

FERRARIS, R., 1981(b). Early assessment of sweet sorghum as an agro-industrial crop. 2. Maturity factors. *Aust. J. Exp. Agric. Anim. Husb.* **21** : 83-90.

FERRARIS, R., 1988. Sweet sorghum: Agronomic evaluation and potential application for Australian Agro-Industry. CSIRO Division of Tropical Crops and Pastures Report No.5

FERRARIS, R. & CHARLES-EDWARDS, D. A., 1986(a). A comparative analysis of the growth of sweet and forage sorghum crops. I. Dry matter production, phenology and morphology. *Aust. J. Agric. Res.* **37** : 495 - 512.

FERRARIS, R. & CHARLES-EDWARDS, D. A., 1986 (b). A comparative analysis of the growth of Sweet and Forage Sorghum crops. II Accumulation of soluble carbohydrate and nitrogen. *Aust. J. Agric. Res.*, **37** : 513 - 522.

FERRARIS, R. & STEWART, G. A., 1979. New options for sweet sorghum. *J. Aust. Inst. Agric. Sci.* **45** : 156-164.

FILHO, P. C. & ELLIS, R. H., 1991(a). The development of seed quality in spring barley in four environments. I. Germination and longevity. *Seed Sci. Res.* **1** : 163-177.

FILHO, P. C. & ELLIS, R. H., 1991(b). The development of seed quality in spring barley in four environments. II. Field emergence and seedling size. *Seed Sci. Res.* **1**: 179-185.

FLEMMING, A. A. & WOOD, E. H., 1967. Effect of soil moisture and plant population on corn hybrids at high fertility level. *Agron. Abst. Div. C* -3 : 35 - 36 (in Downey, L.A., 1971).

FREEMAN, K. C., BROADHEAD, D. M. & ZUMMO, N., 1973. Culture of sweet sorghum for syrup production. *Agric. Res. Serv. Agric. Handbk. No. 441*. U.S. Dep. Agric. : Washington, D.C.

GALANI, N. N., LOMTE, M. H. & CHOUDHARI, S. D., 1991. Juice yield and brix as affected by genotype, plant density and nitrogen levels in high energy sorghum. *Bharatuya Sugar*. **16** : 23 -24. In *Field crop abstracts* 1992 vol. 45 N6. p.371.

GANE, A. J. C., BIIDDI, A. J. C., KNOTT, C. M. & EGLEA, D. J., 1984. *The PGRO Pea Growing Handbook*. Processors and Growers Research Organisation, Peterborough, England. 242 p.

GELMOND, H., LURIA, I., WOODSTOCK, L. W. & PEARL, M., 1978. The effect of Accelerated Ageing of sorghum seeds or seedling vigour. *J. Exp. Bot.* **29** : 489 - 495.

GOLDSWORTHY, P. R., 1970. The growth and yield of tall and short sorghums in Nigeria. *J. Agric. Sci.* **75** : 109 -122.

GRAY, D., STECKEL, J. R. A. & HANDS, L. T., 1992. Leek (*Allium parrum* L.) seed development and germination. *Seed Sci. Res.* **2** : 89-95.

GRZESIK, M., GORNIK, K. & CHOJNOWSKI, M., 1997. Martenol effect on *Callistephus chinensis* seed yield and quality. In : *Basic and Applied Aspects of Seed Biology*. (Eds. R.H. Ellis, M. Black, A.J. Murdoch, T.D. Hong), Kluwer Academic Publisher. Dordrecht / Boston / London. 129 -135.

HALMER, P. & BEWLEY, J. D., 1984. A physiological perspective on seed vigour testing. *Seed Sci. Technol.* **12** : 516 -575.

HAMPTON, J. G. & COLBEAR, P., 1990. Potential versus actual seed performance - can vigour testing provide an answer? *Seed Sci. Technol.* **18** : 215 -228.

HAMPTON, J. G., 1995. Conductivity test. In van de Venter, H. A. (ed.). *Seed vigour testing*. International Seed Testing Association, Zürich, Switzerland.

HANSEN, R. W. & FERRARIS, R., 1985. Post-harvest changes in fermentables sugars in sweet sorghum (*Sorghum bicolor* cv. Wray) *J. Sci. Food Agric.* **36** : 557 -560.

HARLAN, J. R. & de WET, J. M. J., 1972. A simplified classification of cultivated sorghum. *Crop Sci.* **12** : 172 - 176.

HARRINGTON, J. F., 1972. Seed storage longevity. In Kozlowski, T.T. (ed.). *Seed biology*, Volume III. Academic Press, New York. p. 142-245.

HARRIS, D., FRY, G. J., MILLER, S. T. & PAIN, A., 1992. Seedbed and crop establishment. In 'Proceedings of the second annual scientific conference of the SADCC/ODA. Land and water management programme. SACCAR, Botswana.

HARRIS, H. B., PARKER, M. B. & JOHNSON, B. J., 1965. Influence of molybdenum content of soybean seed and other factors associated with seed source on progeny response to applied molybdenum. *Agron. J.* **57** : 397 - 399.

HENZELL, R. G. & GILLIERON, W., 1973. Effect of partial and complete panicle removal on the rate of death on some *Sorghum bicolor* genotypes under moisture stress. *Queensland J. Agric. & Anim. Sci.* **30** : 291 - 299.

HESKER, P., 1966. General botany. In: "Sorghum". Handbook. Publ. No.2 pp 2.1 - 2.3.Old. Dep. Primary Ind. Brisbane. (Cited in Ferraris, R. & Stewart, G.A., 1979.)

HESKETH, J. K., CHASE, S. S. & NANDA, D. K., 1969. Environmental and genetic modification of leaf number in maize, sorghum and Hungarian millet. *Crop Sci.* **9** : 460-463.

HIPP, B. W., COWLEY, W. R., GERARD, C. J. & SMITH, A. B., 1969. Influence of solar radiation and date of planting on yield of sweet sorghum. *Crop Science* **10** : 91-92.

HUMBERT, R., MARIO, P., ZAMORA, M. & FRASER, T. B., 1967. Ripening and maturity control progress at Ingenio Los Mochis; Mexico. Proc. 12 th Congr. ISSCT, Elsevier, Amsterdam pp. 446 - 452.

HUME, D. J. & KEBEDE, Y., 1981. Response to planting date and population density by early maturing sorghum hybrids in Ontario. Canadian J. Plant Science **61** : 265 - 273

IBPGR / ICRISAT. 1993. Descriptors for sorghum (*Sorghum bicolor (L.) Moench*). International Board for Plant Genetic Research Institute for the Semi - Arid Tropics, Patancheru, India.

INMAN-BAMBER, N. G., 1980. An evaluation of sweet sorghum as a sugar crop in the Midlands Mistbelt. S. A. Sugar J. **64** : 419.

INTERNATIONAL SEED TESTING ASSOCIATION. 1985. International rules for seed testing. Rules 1985. *Seed Sci. Technol.* **13** : 299 -520.

INTERNATIONAL SEED TESTING ASSOCIATION. 1987. Handbook of Vigour Test Methods. Int. *Seed Test. Assoc.* Zurich, Switzerland.

INTERNATIONAL SEED TESTING ASSOCIATION. 1993. International rules for seed testing. Supplement to *Seed Sci. Technol.* **21** : 1 - 287.

ISBELL, V. R. & MORGAN, P. W., 1982. Manipulation of apical dominance in sorghum with growth regulators. *Crop Sci.* **22** : 30 - 35.

JACKSON, D. R. & ARTHUR, M. F., 1980. Alcohol crop for the U.S. Gasohol USA.

2 : 26 -33. (In Soileau et.al., 1985)

JANSSEN, G. McCLELLAND, C. K. & METZGER, W. H., 1930. Sap extraction of sorghum and the localization of juice and sugars in internodes of the plant. *J. Am. Agron.* 22 : 627 - 639.

JONSON, M. W., SPEROW, C. B. & McLAREN, G. A., 1961. Factors influencing the yield and quality of sorgo syrup production in West Virginia. W. VA Univ. Agric. Exp. Stn. Bull No. 450 (cited in Doggett, 1970).

JONSON, R.R. & WAX, L.M., 1978. Relationship of soybean germination and vigor tests to field performance. *Agron. J* 70 : 273 – 278.

JORDAN-KARIM, F., 1979. Effects of row spacing and nitrogen fertilizer on yield and yield components of seven sorghum cultivars. Masters Thesis, Dept. Of Agric. Mississippi State Univ. P 45.

JOYCE, R., STECKEL, A., GRAY, D. & ROWSE, H. R., 1989. Relationships between indices of seed maturity and carrot seed quality. *Ann. of Appl. Biol.*, 114 : 177-183.

KAMESWARA R. N., APPA RAO, S., MENGESHA, M. H. & ELLIS, R. H., 1991. Longevity of pearl millet seeds harvested at different stages of maturity. *Ann.of Appl. Biol.*, 119 : 97-103.

KANEMASU, E. T., BARK, D. L. & CHINCHOY, E., 1975. Effect of soil temperature in sorghum emergence. *Plant & Soil* 43 : 411-417.

KARVE, A. D., GHANEKAR, A. R. & KSHIRSAGAR, S. N., 1975. (Cited in Ferraris R.& Steward, A.D., 1979)

KASSAM, A. H. & ANDREWS, D. J., 1975. Effects of sowing date on growth, development and yield of photosensitive sorghum at Samaru, Northern Nigeria. Samaru Research Bul. No 245.

KERMODE, A. R. & BEWLEY, J. D., 1985. The role of maturation drying in the transition from seed development to germination. I. Acquisition of desiccation-tolerance and germinability during development of *Ricinus communis* L. seeds. *J. of Exp. Bot.*, **36** : 1916 - 1927

KHAN, R. A. & LAUDE, H. M., 1969. Influence of heat stress during seed maturation on germinability of barley seed at harvest. *Crop Sci.* **9** : 55 - 58.

LINGLE, S. E., 1987. Sucrose metabolism in the primary culm of sweet sorghum during development. *Crop Sci.* **27** : 1214 - 1219.

MAHESHWARI, B. K., PRASAD, J., SINGH, G. B. & SHARMA, R. K., 1974. Studies of sweet sorghum in India - II. Effect of date of sowing and stage of harvest on yield and quality of sweet sorghum. 40th Proceedings of the S.T.A. of Indian.

MARTIN, J. H., LEONARD, W. H. & STAMP, D. L., 1975. Principles of field crop production. 3rd Ed. Collier Macmillan International Edition London.

MARTIN, P. M. & KELLEHER, F. M., 1984. Effects of row spacing and plant population on sweet sorghum yield. *Aust. J. Exp. Anim. Husb.* **24** : 386-390.

MASHAURI, I. M., COLBEAR, P. & HILL, M. J., 1992. Interactions between seed moisture, processing damage and storage on the subsequent germination performance of maize. Proceedings of the 4th Australian Seed Research Conference. 211 - 216.

MASSACCI, A., BATTISTELLI, A. & LORETO, F., 1996. Effect of drought stress on photosynthetic characteristics, growth and sugar accumulation of field grown sweet sorghum. *Aust. J. Plant Physiol.* **23** : 331 - 340.

MAUNDER, A. B. & SHARP, G. I., 1963. Localization of outcrosses within the panicle of fertile sorghum. *Crop Sci.* **3** : 449-450.

McBEE, G. G. & MILLER, F. R., 1982. Carbohydrates in sorghum culms as influenced by cultivars, spacing and maturity over a diurnal period. *Crop Sci.* **22** : 381 - 385.

McLAREN, N. W., & SMIT, E., 1996. Sorghum diseases in South Africa. ARC-Grain crops Institute. LNR-Instituut vir Graangewasse / Potchefstroom.

MEDINA, P. F. & FILHO, M. J., 1991. Evaluation of physiological quality of maize (*Zea mays L.*) Seeds. *Seed Abst.* **14** : 451.

MILES, D. F., TEKRONY, D. M. & EGLI, D. B., 1988. Changes in viability, germination and respiration of freshly harvested soybean during development. *Seed Sci. Res.* **28** : 700-704.

MILLER, F. R. & CREELMAN, R. A., 1980. Sorghum. A new fuel. P. 219 -232. In Vietor, D.M. & Miller F. R., 1990. Assimilation, partitioning and nonstructural carbohydrates in sweet compared with grain sorghum. *Crop Sci.* **30** : 1109 - 1115.

MILLER, F. R., QUINBY, J. R. & CRUZADO, H. J., 1968. Expression of known maturity genes of sorghum in temperate and tropical environments. *Crop Sci* **8** : 675 - 677.

MOORE. R. P., 1972. Mechanisms of water damage in mature soybean seed. *Proc. Assoc. Offic. Seed Anal.* **61**: 112 - 118.

MYERS, R. J. K. & FOALE, M. A., 1980. Row spacing and population in Australian Grain Sorghum Production. *J. Aust. Inst. Agric. Sc.* 214-220.

OJHA, S. S., SINGH J. P. & AHMAD, N., 1973. Factors affecting juice quality of sugarcane. A review. Indian Sugar. Government Sugarcane Research Station, U.P. 861- 866.

PAULI, A. W., STICKLER, F. C. & LAWLESS, J. R., 1964. Developmental phases of grain sorghum (*Sorghum vulgare Pers.*) as influenced by variety, location and planting date. *Crop Sci.* **4** : 10 - 13.

PEACOCK, J. M., 1982. Response and tolerance of sorghum to temperature stress.

These Proceeding : ICRISAT.

PENDLETON, B. B., TEETES, G. L., & PETERSON G. C., 1994. Phenology of sorghum flowering. *Crop Sci.* **34** : 1263 -1266.

PERRY, D. A., 1983. Commentary on ISTA vigour test committee collaborative trials. *Seed Sci. Technol.* **12**; 301 -308.

PETRINI, C., BELLETTI, A. & SALAMIN, F., 1993. Accumulation and distribution of dry matter and soluble carbohydrates in two sweet sorghum cultivars; influence of sowing date and harvesting time. *Eur. J. of Agron.* **2** : 185 - 192. In Field Crop Abst. 1994 47 No. 8

PREMACHANDRA, G. S. HAHN, D. T. & JOLY, R. J., 1994. Leaf water relations and gas exchange in two grain sorghum genotypes differing in their pre - post flowering drought tolerance. *J. Plant Physiol.* **75** : 617 - 622.

QUINBY, J. R., HESKETH, J. D. & VOIGHT, R. L., 1973. Influence of temperature and photoperiod on floral initiation and leaf number in sorghum. *Crop Sci.* **13** : 243 - 246.

RAM, C., KUMARI, P., SINGH, O. & SARDANA, J., 1989. Relationship between seed vigour tests and field emergence in chickpea seed. *Seed Sci. Technol.*, **17**: 169 -173.

RASYAD, D. A., VAN SANFORD, D. A. & TEKRONY, D. M., 1990. Changes in seed viability and vigour during wheat seed maturation. *Seed Sci. Technol.* **18** : 259-267.

ROBERTS, E. H., 1972. Loss of viability and crop yield. In: E. H. Roberts, ed. *Viability of seeds*, 307 - 320 p. London Chapman and Hall.

ROMKAEW, J., 1996. Influence of seed vigour on field emergence, growth, yield and storeability of large - seeded peanut seed. Master of Science Thesis, Kasetsart University Bangkok. In: Santi

Pracha, Q.Santpracha and Wongvarodom V.,1997. Hybrid corn sees quality and accelerated aging. *Seed Sci. Technology.* **25** : 203 - 208.

ROOS, E. E. & MANALO, J. N., 1971. Testing vigour of beans following favourable storage conditions. *Hort. Science*, **6** : 347 - 348.

SANTO, R. N. & NALAMWAR, R. W., 1991. Effect of herbicides and weeding on RGR, NAR and yield of sorghum. *Annals of Plant Physiology*. **5**(1) 135 - 138 Department of Agronomy, Punjabrao Krishi Vidyapeeth, Akola 444104, Maharashtra, India.

SCHULZE, R. E., 1997. South African Atlas of Agrohydrology and Climatology. Water Research Commission, Pretoria. Report T.T.82/96.

SHAW, R. H. & LOOMIS, W. E., 1950. Bases for the prediction of corn yields. *Plant Physiol.* **25** : 225-244.

SHEPARD, H.L., NAYLOR, R.E.L. & STUCHBURY, T., 1996. The influence of seed maturity at harvest and drying method on the embryo, %amylase activity and seed vigour in sorghum (*Sorghum bicolor* (L) Moench). *Seed Sci. Technol.* **24** : 245 -259.

SHIH, S. F., GASCHO, G. J. & RAHI G. S., 1981. " Modelling biomass production of sweet sorghum." *Agron. J.* **73** : 1027 -1032.

SMITH, B. A., SMITH, R. C., ROMO, R. V., de la CRUZ, R.A. & GRIFFITHS, T. P., 1970. Removal of starch from sweet sorghum juice. *Sugar J.*, **32** : 25 - 30.

SOILEAU, J. M. & BRANDFORD, B. N., 1985. Biomass and sugar yield response of sweet sorghum to lime and fertilizer. *Agron. J.* **77** : 471 - 476.

SON, S.H., 1971. Studies on ecological variation in the inheritance of agronomic characters of sweet sorghum (*Sorghum vulgare* Pers.). Cultivars in Korea. Res rep office rur. Dev., Suwon 14 : 77 - 113. (Fld crop abstr. 1973 No 184).

STANWAY, V., 1958. Prechilled vs non-prechilled germination of *sorghum vulgare* Pers. Assoc. Off. *Seed Anal. Proc.*, **48** : 93-95.

STEEL, R. G. D. & TORRIE, J. H., 1985. Principles and procedures of statistics. McGraw-Hill. Inc., New York.

STICKLER, F. C., PAULI, A. W., LANDE, H. H., WILKINS, H. D. & MINGiS, J. L., 1961. Row width, plant population studies with grain sorghum at Manhattan, Kansas. *Crop. Sci.* **1** : 297-300.

STOKES, I. E. , 1958. Brawley, a new variety of sweet sorghum for southern California. *Sorghum Newsletter*. **1** : 34.

STOKES, I. E., COLEMAN, O. H. & DEAN, J. L., 1957. Culture of sorgo for syrup production. U.S. Dept. Agr. Farmers : Bull 2100. (Cited in Coleman,1970).

STOSKOPF, N.C., 1985. Cereal grain crops. A Prentice-Hall Co. Reston, Virginia. USA.

TEKRONY, D. M. & EGLI, D. B., 1977. Relationship between laboratory indices of soybean seed vigour and field emergence. *Crop Sci.* **17**: 573 - 577.

TEKRONY, D. M., EGLI, D. B. & PHILLIPS, A. D., 1980. Effect of field weathering on the viability and vigour of soybean seed. *Agron. J.* **72** : 749-753.

TEKRONY, D. M., 1993. Accelerated Ageing Test. *J. of Seed Technol.* **17** : 110 -120.

UTZURRUM, J. R., FUKAI, S. & FOALE, M. A., 1998. Effect of late nitrogen application on growth and nitrogen balance of two cultivars of water-stressed grain sorghum. *Aust.J. Agric. Res.*, **49** : 687 - 694.

VAN DEN BERG, J. & DRINKWATER, T. W., 1997. Field guide to identification of sorghum pests in Southern Africa. ARC-Grain crops Institute. LNR-Instituut vir Graangewasse / Potchefstroom.

VAN DE VENTER, H. A., DEMIR, I. & DE MEILLON, 1996. Seed development and maturation in edible dry bean (*Phaseolus vulgaris* L.) cv Teebus. *S. A. Tydskr. Plant Grond.* **13** : 47 -50.

VANDERLIP, R. L., MOCKEL, F. F. & JAN, H., 1973. Evaluation of vigour tests for sorghum seed. *Agron.J.* **65** : 486 - 488.

VENTRE, E. K., 1948. Sucrose, dextrose and levulose content of some domestic varieties of sorgo at different stages of maturity. *J. Agric. Res.* **76** : 145 - 151.

VENTRE, E. K., BYALL, S. & WALTON, C. F. Jr., 1939. Jellying and crystallization of sirups made from different parts of the sorgo stalk at different stages of maturity. *J. Agric. Res.* **59** : 139 - 150.

WALL, J. B., SIEGLINGER, R. & DAVIES, F., 1948. Chemical composition of sorghum plants at various stages of growth, and relation of composition to chinch bug injury. *Okla. Agr. Exp. Stn. Tech. Bull.* T-3. (Cited in Lingle S.E., 1987).

WEBSTER, J. E., BENEFIEL, D. & DAVIES, F., 1953. Yield of sorghum juice in relation to time of harvest. *Agron. J.* 157-160.

WEIBEL, D.E., 1982. Relationships of black layer to sorghum kernel moisture content and maximum kernel weight in the tropics. *Crop Sci.* **22** : 219 – 233.

WILLEY, R. W., & BASIIME, D. R., 1973. Studies on the physiological determinants of grain yield in 5 varieties of sorghum. *J. Agric. Sci.* **81** : 537 548.

WILSON, G. L. & EASTIN, J. D., 1982. The sorghum plant and its environment. These *Proceedings* : ICRISAT.

WILSON, D. O. Jr. & TRAWATHS, S. E., 1991. Physiological maturity and vigour in production of "Florida Staysweet" shrunken 2 sweet corn seed. *Crop Sci.*, **31** : 1640 -1647.

YEKLICH, R. W. & KULIK, M. M., 1979. Evaluation of vigor tests on soybean seeds. Relationship of the standard germination test, seedling vigor classification, seedling length and tetrazolium staining to field performance. *Crop Sci.* **19** : 247 - 253.

ZANAKIS, G. N., ELLIS, R. H. & SUMMERFIELD, R. J., 1994. Seed quality in relation to seed development and maturation in three genotypes of soyabean (*Glycine max*.). *Exp.Agric.*, **30** : 139 -156.

ZARTMAN, R. E. & WOYEWODZIC, R. T.,1979. Root distribution patterns of two hybrid grain sorghum under field conditions. *Agron. J.* **71** : 319 – 325.