

REFERENCES

- Abdel Fattah, A; S. Wahba ; M. Hilal and M.A . Rasheed (1990).** Comparative study of the effect of two soil conditioners on the main soil and plant parameters. Egypt . Jour . of Soil Sci. 30 (1-2) : 141 – 157 .
- Abdel-Rauf, A.M. and Samira, R. Mansour (2003).** Improving soil physical properties and its effect on *Acacia tortilis* seedlings growth under field conditions . Asian Jour. and Plant Sci. 2 (11) 861–868 .
- Abdel Salam, A. A.; F. M. Habib and M. F. Mostafa (1992).** Evaluation the extent and duration of changes in sand properties upon adding polyvinyl alcohol, polyvinyl acetate, bitumen, tafla and farmyard manure. Proc. of Inter. Symp., Soil conditioners, Egypt, PP. 163–172 .
- Abou Deya, I.B. (1995).** Biomass prophety of two years old *Acacia saligna* (Labil), H. Wenldl. Under different habitates and cutting heights. Alex. Jour. Agric. Res. 40 (2): 101-115.
- Abou Deya, I.B. and A.A Kandil (1999).** Soil conditioners and irrigation regime influences on *Leucaena leucocephala* under severe barrenness. Desert Instit. Bull., Egypt 46 (1): 197-213.
- Abou Seeda , M.A. (1982).** Effect of soil conditioners on some physical properties of Egyption soils. M.Sc. Thesis, Fac. Agric. Ghent State Univ., Belgium.

- Ahmed, N. B. (1991).** The stabilization of aeolian sand dunes . Dissert . Abst . Inter . For . Sci. and Engin . Vol 52 : (6), Belgium .
- Ahmed, N. B. (1995).** Chemical stabilization of Baizi sand dunes in Iraq 1 . Effect of some soil stabilizers on the infiltration rate of sand . Qatar , Univ . Sci. , Jour., Vol 15 (1): 109 – 113 .
- Aly, S. M. and W. P. Miller (1995).** Evaluation of two polymers for soil stabilization and wind erosion control . Egypt, Jour. Soil Sci. 35 (1): 71 - 83.
- Aref, I. M; L. I. El Juhamy and S. S. Hegazy (2003).** Comparison of the growth and biomass production of six Acacia species in Riyadh , Saudi Arabia after 4 years of irrigated cultivation. Jour. of Arid Environ. 54 (4): 783 – 792 .
- Askar, F. A. (1988).** Suitability of soil conditioners for desert and cultivated soils in Egypt . Proc. of Inter. Symp., Soil Conditioners, Egypt, pp. 57-80 .
- Awad, F. (1983a).** Pretreating sandy and loamy sand soils with iron or calcium sulphates before a PAM treatment . 1. Their effect on plant growth and Fe and Ca content and uptake . Agrochimica , 27: 418-428.
- Awad, F. (1983b).** Pretreating sandy and loamy sand soils with ions or calcium sulphates before a PAM treatment . 11. Their effect on physicochemical characteristic of the soils. Agrochimica. 27: 406- 417.
- Awad, F.; S. M. S. Bader El Din and M.A. Wahab (1988).** Using soil conditioners to optimize broad bean production in newly reclaimed areas. Agrochimica . ,Vol 31 (6) : 520 - 527.
- Awadala, A. M. (1991).** Effect of soil moisture on the growth of seedlings of Acacia albida (Del .) and

Acacia seyal (Del). Nigerian J. of forestry, 21 (1). 35- 37.

Bahuguna, V. K. and P. Lal (1989). Studies on comparative growth performance of Albizia Procera, Albizia lebbek, Eucalyptus FRI- 4, Dendro calamus strictus and Acacia nilotica at nursery stage . Indian Forester. 115 (9): 613 – 618 .

Balba, A. M. (1988). Factors affecting the efficiency of soil conditioners . Inter. Symp. Soil Conditioners, Egypt, pp: 21-29

Barr, D. A. (1974). Progress in coastal sand dune reclamation in Queensland , Australia . Inter . , Jour . , of Biomet . , Vol 18 (2) : 137 – 141 .

Bebawi , F. F. and S. M. Mohamed (1982). Effect of irrigation frequency on germination and on root and shoot yields of Acacia species . Plant and Soil 65 (2): 275 – 279 .

Ben Salem, B. (1977). Mulching technique of dune fixation : The layer system .Arid Zone Forestry Officer, F A O , Rome : 71 - 74 .

Bradbury, M. (1990). The effect of water stress on growth and dry matter distribution in Juvenile Sesabania sesaban and Acacia nilotica . Arid Environ. 18 (3): 325–333 .

Canarutto, S.; R. Pini; N. Salem. GV. Guidi and G . Vigna (1992). Water retention and structural variations of a sandy soil treated with two soil conditioners. Agric, Medit ., Vol. 122 (3): 236 – 241.

Danilin , M; K. Sabirov and T. A. Yurkevich. (1992). Methods of pasture establishment on drift sands . Problems of desert develop. (2) : 70 – 73 .

- De Boodt , M. F. (1978).** Artificial soil stabilization of backfill in field drainage . Jour ., of Sci ., of Food and Agric.,Sci. Belgium Vol 29 (5): 417-422 .
- De Boodt, M.F. (1979).** Soil conditioning for better soil management. Outlook on Agric. Vol 10:63-70
- Dhillon, R. S; B. S. Ithor, M. S. Hooda and R. P. Mor (2003).** Sand dune stabilization and management of sandy soils for sustainable biomass production in arid ecosystem . Indian Jour . of Agroforestry 5 (1/2): 94– 98 .
- Diab,G.S; A.G.Thabit and I.H. El Sukary (1988).** Effect of viterra planta gel and farmyard manure as soil conditioners on some physical and nutritional properties of sandy and calcareous soils. Inter, Symp. Soil conditioners, Egypt. pp. 153-162
- Dougrameji , J. S. ; F . H ., Ahmed and A . A. Jasim (1988).** Soil crusting and its improvement 1 . Effect of three soil conditioners on penetration resistance and seedling emergence of sugar beet.. J. Agric.and Water Resources Res . Soil and Water Resources 7 (1): 1- 14 .
- Draz, M. Y.; A. M. Ahmed and M. Y. Afify (1992).** Studies on sand encroachment in Siwa Oasis , western desert, Egypt. 11 . Feasibility of sand dune fixation measures.
- Draz, M. Y.; M . M . Wassif and S. E . El Maghraby (1996).** Improvement of Siwa dune sand for the growth of Acacia plants under a saline water regime. 4th Conf . Bull . Cont . Agric . Environ. , Egypt ,Jour. Soil Sci . 36 (1-4) : 153 – 164

- El Amir, S. (1987).** Optimising the soil physical conditions and water mangement in Egypton desertic soils . Ph.D. Thesis , Fac. Agric .Ghent Univ. Belgium .
- El Amir, S; A. Helalia and M. E, Shawky (1992).** Invading sandy soils with soil conditioners . Proc . of Inter . Symp, Soil Conditioners , Egypt, PP. 51 – 56.
- El Amir, S; S. Sawy and E. A . El Morsy (1995).** Chemical amelioration of surface crust . Egypt ,J . Soil. Sci. 35 (2): 191 – 202 .
- El Hady, O . A . (1984).** Criteria to evaluate soil conditioners for aggregate formation and wind erosion control . Egypt. J. Soil Sci. 24, (2): 137 - 144 .
- El Hady, O. A. and A. H. Hanna (1989).** Egyptian bitumen emulsion for soil conditioning preparation in the field method and economical aspects . Egypt. Jour. Soil Sci. 29 (2): 213 – 221 .
- El Hady, O. A; A. H. Hanna and M. M. Khattab (1991).** Interaction of organic manure and bitumen emulsion on a sandy soil and the growth response of olive trees. 1. Plant pit improvement and response on the nutrient levels in the leaves. Egypt. Jour. Soil Sci. 31 (1) : 65-88.
- Fortun, A; R. Thomas and C. Fortun (1996).** Effect of Bituminous materials on soil aggregation. Arid Soil Res. & Reha . 10 (2) : 161 – 168 .
- Fryberger,SG.(1979).**Dune forms and wind regime In Mckee, E.D.ed.Astudy of global sand area.U.S.Geol. Surv.Prof.paper1052:137-170.
- Gardner, W. H. (1972).** Use of synthetic soil conditioners in the 1950s and some implications to their future

development. Proc. Symp. On the Fundamentals of soil conditioners, Ghent Belgium.

Hanna, A. H; O .A. El Hady and Y. Barakat (1989). Petroleum sulphonates for the emulsification of bitumen .1. Application in dune sand stabilization. Egypt. J . Soil Sci., Vol 29 (2) : 201 – 212 .

Harsh , L. N; A. S. Kolar Kar; D. C. Joshi and K. Sharma (1992). Sand dune stabilization techniques for arid regions. Rehabilitation of Degraded arid Ecosystem: 127–135.

Hedrick, R. and D. Mowry (1952). Effect of synthetic polyelectrolytes on aggregation, aeration and water relationships of soil. Soil Sci . 73 : 427-441 .

Hekal, E. K. (1992). Response of broad bean plants to some soil conditioners in sandy soils . Egypt Jour . Soil Sci . Vol. 32 (4) : 587 – 596 .

Helalia, A. M. and S. El- Amir (1988). Potential use of polymers in improving soil water movement. Inter . Symp. Soil Conditioners : 123-126. .

Kamis, A.; C. Chavez and D. C. Chavez (1993). Effect of root wrenching and controlled watering on growth , drought resistance and quality of bare rooted seedling of *Acacia mangium*. Jour. Tropical Forest Sci. 5 (3) : 309-321 .

Khalifa, E. A. (1996). Studies on some wild forage plants . pH.D. Thesis , Fac. Agric. El – Azhar Univ., Cairo, Egypt .

Kirmse, R. D. and J. T. Fisher (1989). Species screening and biomass trials of woody plants in semi arid southwest United States. Biomass 18 (1) : 15 – 29 .

- Machado, R . and C . A . Nunez (1994).** Characterization of cultivars of *Leucaena leucocephala* for forage production I. Establishment. Pastos - Y - forrajes, Cuba, 17 (1) : 13 – 19
- Magsood, A. and H. Verplancke (1994).** Germination and biomass production as affected by salinity in hydrogel treated sandy soil . Pakistan Jour . of Forestry Vol 44 (2) : 53 – 61 .
- Matyn, M. A.; M. Y. Tayel ; S. A. Wahba and M. Abdel- Hady (1988).** Effect of bitumen mulch on the growth of Garlic under different field conditions. Proc. of Inter. Symp, Soil conditioners, Egypt, pp. 289 -316 .
- Michelsen, A. and S. Rosendahl (1990).** The effect of VA mycoerrhizal fungi, phosphoras and drought stress on the growth of *Acacia nilotica* and *Leucaena leucocephala* seedling. Plant and Soil. 124 (1) : 7-13.
- Mikkola, L. and A. M. Jana (1991).** Early results from five species trials in Somalia. Res. Forest. Depart., National Agency (1) : 12 – 28 .
- Miller, W.P. ; R. L . Willis and G. J. Levy (1998).** Aggregate stabilization in Kaolinitic soils by low rates of an ionic polyacrylamide. Soil Use and Mang . Vol. 14 (2) : 101 – 105 .
- Mwangi, S. W. and F. B. Mwaura (1994).** Response of *Leucaena leucocephala*, *L . diversifolia* , *Calliandra calothyrsus* and *Sesbania sesban* to inoculation with rhizobia from several ecological zones of Kenya . 6th Inter . conf . of African Assoc. Boil . N .fix ., Harae , Zimbabwe 12 -17 sept : 219- 223 .
- Nadler, A; E. Perfect and B. D. Kay (1996).** Effect of polyacrylamide application on the stability of dry and

wet aggregates . Soil Sci . Soc . Am . Jour 60 (2)
555 – 561

N.A.S. (1980). Firewood crops. Shrub and tree species for energy production . National Academy of Sciences, Washington, DC.

Native, R.; J. E. Ephrath, P. R. Breliner and Y. Saranga (1999). Drought resistance and water use efficiency in *Acacia saligna* . Aust. J. Bot. 47 (4) : 577 – 587.

Omari, M.A. (1994). Growth of four *Acacia* species as affected by different irrigation regimes . Dirasat Series B, Pure and App. Sci. 21 (4):225 – 236 .

Pandey, A . N .; R . C. Purohit and M. V. Rokad (1995). Soil aggregates and stabilization of sand dune in the Thar desert of India . Environ . Conservation 22 (1) : 71-74 .

Pauwelyn, P.; A. Al Jalaud; H. Verplancke and M. De Boodt (1992). Increasing water use efficiency in sandy desert soils using soil conditioners . Proc . of Inter . Symp, Soil Conditioners, Egypt , pp . 127 – 144 .

Petchey, A. M. (1993). Asphalt floored soils a survey of farmer experience . Farm building Prog. (122) : 16 – 19

Philipps, J. G. and S .J. Riha (1993). Canopy development and solar conversion efficiency in *Acacia auriculiformis* under drought stress . Tree Physical . 12 (2) : 137–149.

Pla, 1 (1975). Effect of bitumen emulsion and polyacrylamide on some physical properties of Venezuelan soils . Special Pub., Soil Sci. of American 7 : 35 – 47 .

- Pla, 1 (1995).** Aggregate size and erosion control on sloping treated with hydrophobic bitumen emulsion .Soil Conservation and Management. Jon Wiley & Sons.; Chichester, UK and New York, USA, : 109 – 115 .
- Pokhriyal, T.; S . Chaukiyal ; S .Una and U . Singh (1997).** Effect of water stress treatments on growth parameters and Nitrogenase activity in *Acacia nolitica* . Indian J . Plant Physiol. 2 (1) : 72 – 74 .
- Rajendra, P.; and R. S., Mertia (2005).** Dehydrogenase activity and VAM fungi in tree – rhizosphere of agroforestry systems in Indian arid zone . Agroforestry Systems 63 (3) : 219- 223 .
- Rashid, C. A; R. M. Omer; W. Ahmed; C. M.; Faisal and Z., Ali (2003).** Performance of four leguminous tree species on planting with *Eucalyptus camaldulensis* . Pakistan Jour. of Agric. Sci. 40 (3/4): 173 – 175 .
- Relwani , L . L. ; L. C. Mahatkar and R. V. Nakal (1993).** Effect of plant populations and frequency of watering on the growth and yield of trees (*Hawaiian giort k8*) . *Leucaena Res . Reports* 4 : 38 – 46 .
- Roy, B. and B. N. Chatterjee (1971).** Soil conditioners and phosphate fertilization for increasing the productivity of leached upland sandy loam soil of water Bengal. Indian Jour . Agric . Sci . Vol. 41 (10) : 839 – 847 .
- Salem, N. (1988).** Evaluation of some parameters influencing the use of conditioners in soil . Inter. Symp. Soil conditioners , Egypt , pp : 81-98
- Salem , N.; G. V.Guidi; R. Pini and A. Khater (1991) .** The use of a polyacrylamide hydrogel to improve the

water holding capacity of a sandy soil under different saline conditions . Agric . , Medit . , Vol 121 (2) : 160 – 165 .

Sanchez, B . F. and G. W. King (1994). Ecological factors affecting the early development of seedlings of three Acacia species from Ethiopia South Africa. J. Plant Soil, 11 (3) : 147 -148 .

Schilling, P. and H. G. Schreuders (1989). Cationic aqueous bituminous emulsion aggregate slurries . U.S . Patent 4810299, 8 pp.

Sharma, B. M. and J. P. Gupta (1999). Polymers and their role in improvement of soil properties and plant growth . Agric . , Rev. , Karnal Vol 20 (3-4) : 233 – 238 .

Singh , C. B; L. K. Idnani and H. K. Singh (2000). Response of irrigation and fertilizer levels on growth and biomass accumulation of Eucalyptus and Leucaena under dryland conditions . Indian Jour . of Soil Conser . 28 (1) : 58 – 60 .

Singh, S.; P. Kunar and K. Prasad. (1989). Effect of mulching under different irrigation levels on height of some tree seedlings . Van – Vigyan . 27 (1) :49 – 54 .

Snedecor, G.W. and W. G. Cochran (1967). "Statistical Methods" Iowa state college Press 6th Ed . The Iowa State Univ . Press Ames Iowa USA , : 325-330

Steel, R. G. and Torrie, J. H. (1980). Principles and procedures of statistics . A biometrical approach .second Edition . Mc Graw – Hill. USA .

Stewart, J. L.; A. J. Dunsdon; M. A. Kishk and M. K. Aly (1993). Screening of non – industrial tree species

on reclaimed desert land in Middle Egypt . Jour . of
Arid Environ . 25 (4) : 375 – 385 .

Swamirath, M. H. (1988). Studies on the response of fast
growing forestry species for biomass production
under irrigation . My Forest . 24 (2) : 117 – 123 .

Testa, S. M. (1995). Chemical aspects of cold mix asphalt
incorporating contaminated soil . J . Soil
Contamination 4 (2) : 191 – 207 .

Tewari, S. K; R. S Katiyar and P. N. Misra (2004).
Effect of age and season of harvesting on the growth
, cropping characteristics and biomass productivity of
Leucaena leucocephala and *Vitex negundo* . Biomass
& Bioenergy 26 (3) : 229 – 234 .

Vandavelde, R.; M. De Boodt and D. Gabriels (1974).
Determination of an erosion index for conditioned
soils in accordance with data of the rainfall simulator.
Pedologie Gent , Belgium Vol. 24 (1) : 5 – 16

Wahba; S. A. (1980). Use of polymers to control wind
erosion. Moscow, Univ., Soil Sci., Bull., Vol. 35 (4) :
52 – 55 .

Wang, J. Z. and T. D. Wu (1992). Use of bitumen
emulsion as a mulch and soil amendment. Soil. 5 (4):
369 – 377.

Zhang, X. C. and W. P. Miller (1996). Polyacrylamide
effect on infiltration and erosion in Furrows . Soil Sci
. Soc . Am . Jour . 60 (3) : 866 – 872 .