

# REFERENCES

## 6. REFERENCES

- Abdallah, Y. N. (1985): Sources and availability of potassium in some soils of Egypt. Ph. D. Thesis, Fac. Agric. Moshtohor, Zagazig University (Banha branch), Egypt.
- Abdel-Hameed, A. H. (1984): Status of manganese in the soils of Kalubia Governorate. M. Sc. Thesis, Fac. Agric. Moshtohor, Zagazig University (Banha branch), Egypt.
- Abdel-Salam, M. A. (2001): Studies on potassium in some soils of Kalubia, Egypt. M. Sc. Thesis, Fac. Agric. Moshtohor, Zagazig University (Banha branch), Egypt.
- Abou El-Naga, S. A.; Omran, M. S. and Sehata, A. M. (1996): The combined effect of organic manure (FYM) and irrigation regime on the biological activity and nutrients availability in green pepper. Egypt. J. Soil Sci., 36:33445.
- Addiscott, T. M.; Whitmore, A. P. and Powlson, D. S. (1991): Farming, fertilizers and the nitrate problem. CAB International, Wallingford.
- Allison, F. E. (1966): The rate of nitrogen applied to soils, Adv. In Agron., 18: 219-225.
- Attia, M. (1979): An approach to land evaluation for rural purpose of some alluvial soils of Egypt. M. Sc. Thesis, Fac. Agric., Cairo University, Egypt.

- Barber, S. A. (1984): Soil nutrient bioavailability: A Mechanistic Approach. A Wiley-Interscience Publications, John Wiley & Sons.
- Bartholomew, W. V. (1965): Mineralization and immobilization of nitrogen in the decomposition of plant and animal residues. In: W. V. Bartholomew and F. E. Clark (eds) Soil nitrogen. Monograph No. 10, Amer. Soc. of Agron., Madison, Wis., pp. 285-306.
- Beauchamp, E. G. and Paul, J. W. (1989): A simple model to predict manure N availability to crops in the field. In: Hansen, A. J. and Henriksen, K. (eds) Nitrogen in organic wastes applied to soils. Academic Press, London, pp. 140-149.
- Beckett, P. H. T. (1964): Studies on soil potassium. II: The "immediate" Q/I relations of labile potassium in the soil. J. Soil Sci., 15:9-23.
- Black C. A., Evans, D. D. Ensminger L. E., White, J. It. and Clark, F. E. (1965): Methods of Soil Analysis. Amer. Soc. Agron. Inc., Madison, Wisc., USA.
- Black, A. S.; Sherlock R. R. and Smith, N. P. (1987): Effect of timing of simulated rainfall on ammonia volatilization from urea, applied to soil of varying moisture content. J. Soil Sci., 38:679-687.

- Boischot, P.; Coppenet, M. and Hebert, J. (1950): The fixation of phosphoric acid on calcium carbonate in soils *Plant and Soil*, 2:311-322.
- Bouwmeester, It J. B.; Vlek, P. L. G. and Stumpe, J. M. (1985): Effect of environmental factors on ammonia volatilization from a urea-fertilized soil. *Soil Sci. Soc. of Amer. J.*, 49:376-381.
- Bremner, J. M. (1965): Nitrogen availability indexes. In: Black, (ed.) *Methods of Soil Analysis. Part 2. Chemical and Microbiological Properties. American Society of Agronomy, Madison, Wisconsin*, pp. 1324-1345.
- Bremner, J. M. and Mulvaney, C. S. (1982): Nitrogen-Total. In: A. L. Page: *Methods of Soil Analysis. Part 2: Chemical and Microbiological Properties*, 2<sup>nd</sup> edition, *Soil Sci. Soc. of Amer. Agronomy Series No. 9*. pp 595-624.
- Collison, R. C. and Mensching, J. E. (1980): Lysimeter investigations. 1- Nitrogen and water relations of crops in legume and non-legume rotations. New York, State Agric. Exp. Sta. Tec., Bull. 166.
- Eick, M. J.; Brady, W. D. and Lynch, C. K. (1999): Charge properties and nitrate adsorption of some acid southeastern soils. *Journal of Environmental Quality*, 28:138-144.
- El-Agrodi, M. W. M.; El-Sirafy, Z. M.; Taha, A. A. and El-Hadidi, E. M. (1991): Sorghum growth and nutrients content in relation to soil salinity and nitrogen fertilization. *Egypt. J. Soil Sci.*, 31:181-194.

- El-Ghanam, M. M. (1996): Towards a new approach for assessing the hazardous effects of soil salinity and sodicity. Ph. D. Thesis, Fac. Agric. Mosthohor, Zagazig Uniyersity (Banha branch), Egypt.
- El-Kholy, M. M. I. (1999): Nitrogen forms content produced from decomposition of some organic materials during incubation in soils and their effect on micronutrients availability. M. Sc. Thesis, Fac. Agric., Menofiya University, Egypt.
- Esmat, H. A. Nofal (1984): Behaviour and availability of iron in some soils of Egypt. M. Sc. Thesis, Fac. Agric. Moshtohor, Zagazig University (Banha branch), Egypt.
- Evangelou, V. P. and Karathanasis, A. D. (1986): Evaluation of potassium quantity-intensity relationships by a computer model employing the Gapon equation. *Soil Sci. Soc. Am. J.*, 50:58-62.
- Floate, M. J. S. and Torrance, C. J. W. (1970): Decomposition of organic materials from hill soils and pastures. 1. Incubation method for studying the mineralization of carbon, nitrogen and phosphorus. *Journal of the Science of Food and Agriculture* , 21: 116-120.
- Gao, G. and Change, C. (1996): Changes in CEC and particle size distribution of soils associated with long term annual applications of cattle feed manure. *Soil Science*, 161:115-120.

- Garwood, E. A. and Ryden, J. C. (1986): Nitrate loss through leaching and surface runoff from grassland: Effect of water supply, soil type and management. In: Van der Meer, H. G., Ryden, J. C. and Eimik, G. C. (eds) Nitrogen Fluxes in Intensive Grassland Systems. Martinus Nijhoff, Dordrecht, pp. 99-113.
- Ghazy, M. A. (1994): Effect of water regime, gypsum and sewage sludge increment on the improvement and productivity of saline sodic soils. Ph.D. Thesis, Fac. Agric., Tanta University, Kafar El-Sheich, Egypt.
- Green, C. J.; Blaclaner, A. M. and Yang, N. C. (1994): Release of fixed ammonium during nitrification in soils. Soil Sci. Soc. of Amer. J., 58:1411-1415.
- Hamra, A. M. A. (1982): Studies on the nature of interference between the alluvial and desert soils on the eastern border of the Nile Delta. Ph. D. Thesis, Fac. Agric. Moshtohor, Zagazig University (Banha branch), Egypt.
- Hassink, J. (1992): Effect of grassland management on N mineralization potential, microbial biomass and N yield in the following year. Nethberland Journal of Agricultural Science, 40:1565-1571.
- Hassink, J.; Neutel, A. M. and De Ruiter, P. C. (1994) C and N mineralization in sandy and loamy grassland soils: the role of microbes and microfauna. Soil Biology and Biochemistry, 26:1565-1571.

- Haynes, R. J. (1986): The decomposition process: mineralization, immobilization, humus formation and degradation. In: Haynes, R.J. (ed.) Mineral Nitrogen in the Plant-soil System. Academic Press, London, pp. 52-126.
- Ibrahin, A. A. K. (2001): A comparative study of some methods used for assessing the availability of N, P and K in soils. Ph.D. Thesis, Fac. Agric. Moshtohor, Zagazig University (Banha branch), Egypt.
- Jackson, M. L. (1967): Soil Chemical Analysis. Prentice Hall of India Private. Ltd., New Delhi.
- Junk, A. (1970): Interactions between the nitrogen concentration ( $\text{NH}_4$ ,  $\text{NH}_4\text{NO}_3$  and  $\text{NO}_3$ ) and the pH of the nutrient solution, and their effects on the growth and ion balance of tomato plants. *Gartenbauwissenschaft*, 35:13-28.
- Keeney, D. R. and Nelson (1982): Nitrogen-Inorganic forms. In: A. L. Page: Methods of Soil Analysis. Part 2: Chemical and Microbiological Properties, 2<sup>nd</sup> edition, Soil Sci. Soc. of America. Agronomy Series No. 9., pp 643-698.
- Kithome, M.; Paul, J.W.; Lavkulich, L. M. and Boxlike, A. A. (1998): Kinetics of ammonium adsorption and desorption by the natural zeolite clinoptilolite. *Soil Sci. Soc. of Am. J.*, 62: 622-629.

- Kithome, M.; Paul, J.W.; Lavkulich, L. M. and Bomke, A. A. (1999): Effect of pH on ammonium adsorption by natural zeolite clinoptilolite. *Communication in Soil Science and Plant Analysis*, 30:1417-1430.
- Kithome, M.; Paul, J.W. and Kannangara, T. (1999): Adsorption isotherms of ammonium on coir. *Communication in Soil Science and Plant Analysis*, 30:83-95.
- Li, Y. C.; Alva, A. K.; Calvert, D. V. and Banks, D. J. (1995): Adsorption and transport of nitrate and bromide in a spodosol. *Soil Science*, 160:400-404.
- Li, Z. and Li, Z. (1999): Oxyanion sorption and surface anion exchange by surfactant-modified clay minerals. *Journal of Environmental Quality*, 28:1457-1463.
- Lumbanraja, J. and Evangelou, V. P. (1994): Adsorption-desorption of potassium and ammonium at low [cation concentrations in three Kentucky subsoils. *Soil Science*, 157: 269-278.
- Lyon, J. L.; Bizzell, J. A.; Wilson, B. D. and Leland, E. W. (1980): Lysimeter experiment. II. Records for tanks 3 to 12 during the years 1910 to 1924 inclusive. New York (Cornell-Uni.) Agric. Exp. Sta. Mem.
- Lyster, S.; Morgen, M. A. and O'Toole, P. (1980)• Ammonia volatilization from soils fertilized with urea and ammonium nitrate. *Journal of life Sciences, Royal Dublin Society* 1:167-176.

- McGarry, S. J., O'Toole, P. and Morgan, M. A. (1987): Effects of soil temperature and moisture content on ammonia volatilization from urea-treated pasture and tillage soils. *Irish Journal of Agricultural Research*, 26:173-182.
- McTernan, W. F. (1989): Variables and technical relationships involved in the contamination of shallow groundwaters by agricultural chemicals. In: J. R. Nelson and E. M. McTernan (eds.) *Agriculture and groundwater quality: examining the tissue*. The University Center for Water Research, Oklahoma State University, Stillwater, OK.
- Mishra, B. K.; Misra, S. R.; Jena, D. and Misra, C. (2000): Transport and transformation of urea super granule in an inceptisol under flooded conditions. *J. of the Indian Soc. of Soil Sci.*, 48:209-214.
- Nashida, I. Abd El Aal (1983): Chemical and physical studies on some soils of Kalubia Governorate. M. Sc. Thesis, Fac. Agric. Moshtohor, Zagazig University (Banha branch), Egypt.
- Nelson, K. E.; Turgeon, A. G. and Street, J. R. (1980): Thatch influence on mobility and transformation of nitrogen carriers applied to turf *Agronomy Journal*, 72:487-491
- Nommick, H. and Vahtras, K. (1982): Retention and fixation of ammonium and ammonia in soils. In: Stevenson, F. X (ed.) *Nitrogen in Agricultural Soils*. American Society of Agronomy, Madison, Wisconsin, pp. 123-171.

- Opuwaribo, E. and Odu, C. T. I. (1978): Ammonium fixation in Nigerian soils: 4. The effects of time, potassium and wet and dry cycles on ammonium fixation. *Soil Science*, 125:137-145.
- Page, L. A., Miller, R. H. and Keeney, D. R. (1982): *Methods of Soil Analysis. Part 2: Chemical and Microbiological Properties*, 2<sup>nd</sup> edition, Soil Sci. Soc. of America. Agronomy Series No. 9.
- Pagel, H. and Van Huay, H. (1976): Wichtige parameter der phosphatsorptionkurven einiger Boden der tropen and subtropen and ihre zeitliche veränderung durth P-Düngung. *Arch. Acker u. Pflnzenbau u. Bodenk.*, 20:765-778.
- Parkin, T. B. and Berry, E. C. (1994): Nitrogen transformations associated with earthworm casts. *Soil Biology and Biochemistry*, 26:1194-1199.
- Parsons, A. J.; On, R. J.; Penning, P. D. and Lockyer, D. R. (1991): Uptake, cycling and fate of nitrogen in grass-clover continuously grazed by sheep. *Journal of Agricultural Science, Cabridge*, 116:47-61.
- Phillips, I. R. (1999): Nitrogen availability and sorption under alternating waterlogged and drying conditions. *Communication in Soil Science and Plant Analysis*, 30:1-20.

- Piper, C. S. (1950): "Soil and plant analysis". International science publications, Inc. New York.
- Qafoku, N. P.; Summer, M. E. and Radcliffe, D. E. (2000): Anion transport in columns of variable charge subsoils: nitrate and chloride. *Journal of Environmental Quality*, 29:484-493.
- Rachhpal-Singh and Nye, P. H. (1986a): A model of ammonia volatilization from applied urea. 1. Development of the model. *Journal of Soil Science*, 37:9-20.
- Rachhpal-Singh and Nye, P. H. (1986b): A model of ammonia volatilization from applied urea. III. Sensitivity analysis, mechanisms and applications. *Journal of Soil Science*, 37:9-20.
- Reisenauer, H. M. (1964): Mineral nutrients in soil solution. In: P. L. Altman and D. S. Dittmer (eds), *Environmental Biology*. Fed. Am. Soc. Exp. Biol., Bethesda, Md., pp. 507-508.
- Reynolds, C. M. and Wolf, D. C. and Wolf, D. C. (1987): Influence of urease activity and soil properties on ammonia volatilization from urea. *Soil Science*, 143:418-425.
- Reynolds-Vargas, J. J.; Richter, D. D. and Bornemisza, E. (1994): Environmental impacts of nitrification and nitrate adsorption in fertilized aridisols in the valle central of Costa Rica. *Soil Science*, 157:289-299.

- SAS (1996): SAS Procedure Guide "version 6.12 Ed" . SAS Institute Inc., Cary, NC, USA.
- Scarsbrook, C. E. (1965): Nitrogen availability. In: W. V. Bartholomew and F. E. Clark (eds) Soil nitrogen. Monograph No. 10, American Society of Agronomy, Madison, Wis. pp. 481-502.
- Scholefield, D.; Tyson, K. C.; Garwood, E. A.; Armstrong, A. C.; Hawkins, J. and Stone, A. C. (1993): Nitrate leaching from grazed grassland lysimeters: effects of fertilizer input, field drainage, age of award and patterns of weather. *Journal of Soil Science*, 44:601-613.
- Shen, S. Tu, S.; Kemper, W. D.; Shen, S. Y. and Tu, S. (1997): Equilibrium and kinetic study of ammonium adsorption and fixation in sodium-treated vermiculite. *Soil Sci. Soc. of Am. J.*, 61:1611-1618.
- Smith, S. J. and Stanford, J. (1971): Evaluation of a chemical index of soil nitrogen availability. *Soil Science*, 111:228-232.
- Smith, S. J.; Young, L. P. and Miller, G. E. (1977): Evaluation of soil nitrogen mineralization potentials under modified field conditions. *Soil Sci. Soc. Amer. J.*, 41:74-76.
- Soltan, S.A.; El-Hussieny, O. H. and Abel-hamied, Af H. (1996): Plant growth and utilization of macronutrients (and sodium) in salt affected soils. *Annals of Agric. Sci. Moshtohor*, 34:2025-2040.

- Stanford, G. and DeMar, W. H. (1969): Extraction of soil organic nitrogen by autoclaving in water. 1. The NaOH-distillable fraction as an index of soil nitrogen availability. *Soil Sci.*, 107:203-205.
- Stanford, G. and Smith, S. J. (1972): Nitrogen mineralization potentials of soils. *Soil Sci. Soc. Amer. J.*, 36:465-472.
- Steele, K. W. (1987): Nitrogen losses from managed grasslands. In: Snaydon, R. W. (ed.) *Ecosystems of the World. 17 B. Managed Grasslands*. Elsevier, Amsterdam, pp. 197-214.
- Stevenson, F. J. (1959): Distribution of fixed ammonium in soils. *Soil Sci. Soc. Amer. Proc. J.*, 23:121-125.
- Stevenson, F. J. (1982): Nitrogen-Organic forms. In: *Methods of Soil Analysis. Part 2: Chemical and Microbiological Properties, 2<sup>nd</sup> edition*, Soil Sci. Soc. of America. Agronomy Series No. 9., pp 625-641.
- Syers, J. K.; Brownian, M. G.; Smillie, G. W. and Corey, R. B. (1973): Phosphate sorption by soils evaluated by the Langmuir adsorption equation. *Soil Sci. Soc. Am. Proc.*, 37:358-363.
- Terman, G. L. and Hunt, C. M. (1964): Volatilization losses of nitrogen from surface-applied fertilizers, as measured by prop response. *Soil Sci. Soc. of Am. Proc.*, 28:667-672.

- Thompson, T. L.; Blackmer, A. M. and Sanchez, C. A. (1988): Fixed ammonium in fields treated with  $^{15}\text{N}$ -labeled anhydrous ammonia. P. 226. In Agronomy abstracts. ASA, Madison, WI.
- Thompson, T. L.; Blackmer, A. M. and Sanchez, C. A. (1991): Exchangeable and nonexchangeable ammonium in fields treated with  $^{15}\text{N}$ -labeled anhydrous ammonia. P. 302. In Agronomy abstracts. ASA, Madison, WI.
- Van Huay, H. (1975): Untersuchungen fiber die phosphat-sorption einger tropischer Baden und Tonminerale. Leipzig, Institut fur Tropischer Landwirtschaft und Veterinarmedizin der Karl-Marx-Univ., Dissertation A.
- Vaughn, C. E.; Center, D. M. and Jones, M. B. (1986): Sesonal fluctuations in nutrient availability in some northern California and range soils. Soil Science, 141:43-51.
- Vlek, P. L. G.; Fillery, I. R. P. and Burford, J. R. (1981): Accession, transformation and loss of nitrogen in soils of the arid region. Soil, Water and Nitrogen in Mediterranean-type environmental, pp. 133-174.
- West, N. I. (1975): Nutrient cycling in desert ecosystem. In: Short Term Ecosystem Dynamics in Arid Lans. Cambridge University Press, London.
- Whitehead, D. C. (1995): Grassland Nitrogen. Biddks, Ltd, Guildford, UK.

Whitehead, D. C.; Lockyer, D. R. and Raistrick, N. (1989 b): volatilization of ammonia from urea applied to soil: influence of hippuric acid and other constituents of livestock urine. *Soil Biology and Biochemistry*, 21:803-808.

Whitehead, D. C. and Raistrick, N. (1990): Ammonia volatilization from five nitrogen compounds used as fertilizers following surface application to soils. *Journal of Soil Science*, 41:387-394.

Whitehead, D. C. and Raistrick, N. (1993): The volatilization of ammonia from cattle urine applied to soils as influenced by soil properties. *Plant and Soil*, 148:43-51.