

**GREGORIO B. BEGONIA, Ph.D.**  
**Professor & Chair**

**SELECTED PEER - REVIEWED PUBLICATIONS (2000-2009):** [Note: **u** =undergraduate; **m** =M.S.; **d** =Ph.D. students; respectively, \* = corresponding author]

01. Ekunwe, Stephen\*, Melvaniue S. Thomas<sup>m</sup>, Xuan Luo<sup>d</sup>, Hengshan Wang, Yong Chen<sup>m</sup>, Xiaopu Zhang<sup>m</sup>, **Gregorio Begonia**. 2009. Potential cancer-fighting *Ocimum gratissimum* (Og) Extracts: Increased anti-proliferation activity of purification fractions and their spectral fingerprints. *Journal Ethnicity & Disease.* (*accepted for publication, March 6, 2009*)
02. Ntoni<sup>d</sup>, J., M.T. Begonia\*, **G.B. Begonia**, and G. S. Miller<sup>d</sup>. 2008. Effects of cadmium on the production of phytochelatins by wheat (*Triticum aestivum* L.) during phytoextraction. *Int. J. Environ. Res. Public Health* (to be submitted in June 2009)
03. Ntoni<sup>d</sup>, J., M.T. Begonia\*, **G.B. Begonia**, G. S. Miller<sup>d</sup> and A. Benjamin<sup>u</sup>. 2008. Chelate-mediated changes in soil metal solubility: Implications in the uptake and translocation of cadmium by wheat (*Triticum aestivum* L.) at different growth stages. *Int. J. Environ. Res. Public Health* (to be submitted in June 2009)
04. Miller<sup>d</sup>, G., **G. Begonia\***, M. Begonia, and J. Ntoni. 2008. Bioavailability and uptake of lead by coffeeweed (*Sesbania exaltata* Raf.). *Int. J. Environ. Res. Public Health*, 5(5):436-440.
05. Miller<sup>d</sup>, G., **G. Begonia\***, M. Begonia, J. Ntoni<sup>d</sup> and O. Hundley<sup>u</sup>. 2008. Assessment of the efficacy of chelate-assisted phytoextraction of lead by coffeeweed (*Sesbania exaltata* Raf.). *Int. J. Environ. Res. Public Health*, 5(5): 428-435.
06. **Begonia\***, **G.B.** and M. Begonia. 2007. Plant photosynthetic production as controlled by leaf growth, phenology, and behaviour. *Photosynthetica* 45(3): 321-333.
07. **Begonia\***, **G.B.**, M.T. Begonia, J. Ntoni<sup>d</sup>, and G.S. Miller<sup>d</sup>. 2006. Chelate-enhanced solubility of metal increases phytoextraction of lead-contaminated soils by wheat (*Triticum aestivum* L.). In M.C. Alpoim, P.V. Morais, M.A. Santos, A.J. Cristovao, J.A. Centeno, and P. Collery (eds.). *Metal Ions in Biology and Medicine* 9: 141-145.
08. Begonia\*, M.T., **G.B. Begonia**, G.S. Miller<sup>d</sup>, and J. Ntoni<sup>d</sup>. 2006. Influence of chelates on metal solubility: Implications in the phytoextraction of lead-contaminated soils by tall fescue (*Festuca arundinacea* Schreb.). In M.C. Alpoim, P.V. Morais, M.A. Santos, A.J. Cristovao, J.A. Centeno, and P. Collery (eds.). *Metal Ions in Biology and Medicine* 9: 146-150.
09. Kambhampati<sup>d</sup>, M.S., **G.B. Begonia**, M.F.T. Begonia, and Y. Bufford<sup>u</sup>. 2005. Morphological and physiological responses of morning glory (*Ipomoea lacunosa* L.) grown on a lead- and chelate-amended soil. *Int. J. Environ. Res. Public Health* 2 (2): 299 – 303.
10. Shumaker<sup>d</sup>, K.L. and **G. Begonia**. 2005. Heavy metal uptake, translocation, and bioaccumulation studies of *Triticum aestivum* cultivated in contaminated dredged materials. *Int. J. Environ. Res. Public Health* 2 (2): 293-298.
11. Begonia\*, M.T., **G.B. Begonia**, M. Igboavodha<sup>d</sup>, and D. Gilliard<sup>u</sup>. 2005. Lead accumulation by tall fescue (*Festuca arundinacea* Schreb.) grown on a lead-contaminated soil. *Int. J. Environ. Res. Public Health* 2 (2): 228 - 233.

12. Begonia, M.T., **G.B. Begonia\***, G.S. Miller<sup>d</sup>, and D. Gilliard<sup>u</sup>. 2004. Effects of chelate application time on the phytoextraction of lead-contaminated soils. Bull. Environ. Contam. Toxicol. 73: 1033 - 1040.
13. Begonia\*, M.T., **G.B. Begonia**, G. Miller<sup>d</sup>, D. Gilliard<sup>u</sup>, and C. Young<sup>u</sup>. 2004. Phosphatase activity and populations of microorganisms from heavy metal-contaminated soils. Bull. Environ. Contam. Toxicol. 73: 1025 - 1032.
14. Begonia, M.T., **G.B. Begonia\***, A.D. Butler<sup>m</sup>, U. Griffin<sup>u</sup>, and C. Young<sup>u</sup>. 2003. Chemically-enhanced phytoextraction of cadmium-contaminated soils using wheat (*Triticum aestivum* L.). Bull. Environ. Contam. Toxicol. 71(3): 648-654.
15. Kambhampati<sup>d</sup>, M.S., **G.B. Begonia\***, M.F.T. Begonia, and Y. Bufford<sup>u</sup>. 2003. Phytoremediation of a lead-contaminated soil using morning glory (*Ipomoea lacunosa* L.): Effects of a synthetic chelate. Bull. Environ. Contam. Toxicol. 71(2): 379-386.
16. **Begonia\***, G.B., G.S. Miller<sup>m</sup>, M.F.T. Begonia, and C. Burks<sup>u</sup>. 2002. Chelate-enhanced phytoextraction of lead-contaminated soils using coffeeweed (*Sesbania exaltata* Raf.). Bull. Environ. Contam. Toxicol. 69(5): 624-631.
17. Begonia, M.F.T., **G.B. Begonia\***, A. Butler<sup>m</sup>, M. Burrell<sup>u</sup>, O. Igboavodha<sup>u</sup>, and B. Crudup<sup>u</sup>. 2002. Chelate-assisted phytoextraction of lead from a contaminated soil using wheat (*Triticum aestivum* L.). Bull. Environ. Contam. Toxicol. 68: 705-711.
18. **Begonia\***, G.B., M.F.T. Begonia, G.L. Miller<sup>m</sup>, and M.S. Kambhampati<sup>d</sup>. 2000. Phytoremediation of metal-contaminated soils: Jackson State University research initiatives. In J.A. Centeno, P.H. Collery, G. Vernet, R.B. Finkelman, H. Gibb, and H. Etienne, (eds.). Proc. Metal Ions in Biology and Medicine 6: 682-684.
19. Hardy, M.G., S. Sanders-Leggett<sup>d</sup>, and **G. Begonia\***. 2000. Effects of NaCl and MgCl<sub>2</sub> on physiological and biochemical changes in osmoregulation of *Chlorococcum hypnosporum* L. J. Mississippi Acad. Sci. 45: 124-129.