

Walter A. Hill, Professor and Provost
Dean, College of Agriculture, Environment and Nutrition Sciences
USDA 1890 Land Grant Research Director and Cooperative Extension Administrator
Tuskegee University

EDUCATION

University of Illinois, Ph.D. 1978 Agronomy/Environmental Chemistry
University of Arizona, M.S. 1973 Soil Chemistry

University of Chicago, M.A.T. 1970 Chemistry
Lake Forest College, B.S. 1968 Chemistry

WORK EXPERIENCES – TUSKEGEE UNIVERSITY

Professor, 1984-Present; Associate Professor, 1981-84; Assistant Professor, 1978-81, Dept. Agricultural & Environmental Sciences
Provost 2013-Present; Vice Provost, 2012-2013
Dean, College of Agriculture, Environment & Nutrition Sciences, 2011-present, Tuskegee University
Dean, College of Agricultural, Environmental & Natural Sciences, 1996-2011, Tuskegee University
Dean, School of Agriculture and Home Economics, 1987-1995, Tuskegee University
Administrator, Tuskegee University Cooperative Extension, 2011-present and 1987-1991, Tuskegee University
Research Director, USDA Evans-Allen Research and Director, George W. Carver Agricultural Experiment Station, 1986-Present
Courses taught: general soil science, soil chemistry, soil physics, soil microbiology, soil classification, soil & water conservation, soil testing and plant analysis, introductory chemistry, and freshman orientation
High School Teacher - chemistry, general science, and physical science, 1969-71, Chicago Public Schools

Areas of Leadership and Service: Interdisciplinary and integrative learning/teaching, discovery/research, and Engagement/extension; and effective university-community based organization partnerships

CAREER IMPACTS AND INNOVATIONS

- * Advisor for 17 Award Winning Student Science Projects
- * Provided leadership in facilitating online and blended courses and distant education programs at Tuskegee University
- * Co-led the development of three PhD Programs at Tuskegee University 1) Integrative Biosciences, 2) Agricultural and Environmental Sciences Engineering and 3) Public Policy and International Affairs; facilitated development of the Forest Resources BS/MS degree program, the Environmental Science BS Degree Program, the BS Dual Degree program in Food and Nutritional Science/Biology, the MS in Agricultural and Resource Economics Program and the BS in Agribusiness.
- * Initiated and co-developed ongoing science, technology, engineering, agriculture and math (STEAM) programs for K-12 students and teachers, including the NSF Noyce Scholars program, AgriTrek/SciTrek/AgDiscovery Summer Research Experience, and Carver Exp. Station Apprenticeship Program; also initiated the CAENS Math Infusion Center to strengthen mathematics performance and utilization by students majoring in the food and agricultural sciences
- * Provided leadership for the NASA sponsored Center for Food and Environmental Systems which provided research opportunities for 300 underrepresented minority students in plant physiology and genomics, food science and nutrition, engineering and computer science, and microbiology and environmental science; the Center team published 100+ papers completed two space flight experiments and developed protocols for growing, processing, and utilization of sweetpotatoes, peanuts, carrots and herbs for use on long-term space missions and for small businesses development; also provided leadership for the Space Life Sciences and Training Program (SLSTP) Academic Partnership at Kennedy Space Center.
- * Co-invented and co-patented the system for successful sweetpotato storage root enlargement in a nutrient film (soilless) system with implications for crop growth during long-term space missions.
- * Established the association of non-symbiotic nitrogen fixing bacteria and nitrogen use efficiency for selected sweetpotato cultivars grown in low nitrogen level soils in the southern USA and Nigeria.
- * Provided leadership for the Southern Food Systems Education Consortium (SOFSEC, 9 states, 10 yrs.), Small Farm Regional Marketing Project (9 states, 5 yrs.) and the Professional Agricultural Workers Conference (18 southern & border states, 24 yrs.) focused on serving small, underserved farmers, rural communities & schools, through building sustainable partnerships.
- * Worked effectively in partnership with community based organizations, other universities and agencies to address issues of agricultural and environmental sustainability, inequities and empowerment, and poverty and wealth creation-examples include the Alabama Agricultural Land Grant Alliance, Black Belt Community Foundation, and Black Belt Action Commission.
- * Provided leadership in the development of the concept and partnerships required to plan and implement the Carver Integrative Sustainability Center (USDA 1890 Center of Excellence) and Alabama Black Belt Fruit and Vegetable Market Innovation Center (serving 18 counties); worked directly with local leaders and farmers to establish and sustain the Macon County Farmer's Market, and served as PI for the five-state Walmart sponsored project "Sustainable Agriculture Consortium for Historically Disadvantaged Farmers; worked with others to develop the "Small farmers Agricultural Cooperative" that sells fruit and vegetables to Walmart and Whole Foods (2011-present)
- * Provided leadership support for international development projects in 9 African countries (USDA/FAS and USAID, over 20yrs.)
- * Provided leadership in increasing State of Alabama funds for Tuskegee University in Research, Extension, and Operations Maintenance (2000-present).
- * Facilitated planning and construction of Henderson Hall, a 43,000 sq. ft. state-of-the-art, agricultural & life sciences teaching, research and Extension building; opened fall 2013.
- * Provided leadership for integration of food and agricultural teaching, research and Extension programs at Tuskegee University

LEADERSHIP/SERVICE

Chair 1890 Council of Deans, 2011-2013 and 1992-1994; Chair, Association of Research Directors, 1994-96;
Secretary, Academic Heads Section, Association of Public and Land Grant Universities, 2012-present
Board of Directors, The Global Food Protection Institute, Battle Creek Michigan, 2012-present
Co-Chair, USDA 1890 Task Force Executive Team, 2011-2013
Founder, Carver Integrative Sustainability Center (1890 Land Grant-USDA Center of Excellence), 2010
Founder, Black Belt Family Farm Fruit and Vegetable Marketing & Innovation Center, 2011-present
PI, Co-Director, NSF, Tuskegee University Noyce Teachers Scholars in STEM Education, 2009-present
Chair, Alabama State Committee, USDA Farm Service Agency, 2009-present
Board of Directors, Alabama Nature Conservancy, 2009-present
Commissioner, Alabama Black Belt Action Commission, Agricultural Committee, 2004-present

Board of Directors, Founding Member, Black Belt Community Foundation, 2004-12; Chairperson, 2009-12; Treasurer, 2006-09
 Chair, Professional Agricultural Workers Conference, 1988-present; Co-Founder Professional Agricultural Workers Journal, 2013
 Steward Board, Washington Chapel AME Church, Tuskegee, AL, 1993-present
 Co-Founder, Alabama Agricultural Land Grant Alliance, 1999-present; Chair, 2004-2005 and 2010-2013
 PI, Director, Southern Food Systems Education Consortium (SOFSEC), Kellogg Foundation, 1994-2007
 Co-Director, USDA/IFAFS Small Farmer Regional Marketing Project, 2001-2006
 Featured in "George Washington Carver Tech," Modern Marvels, History Channel, 2005-present; "The New Explorers" Television
 Series; Public Broadcasting Station, 1992-present; the Chicago Field Museum, George Washington Carver Exhibit, 2008; and
 the Walmart Global Sustainable Agriculture Milestone Meeting, 2010 (<http://walmartstores.com/Sustainability/10300.aspx?p=9496>)
 Board of Directors, American Distance Education Consortium, 1990-2005
 NASA Biological & Physical Research Advisory Committee, 2001-2004; NASA Life Sciences Advisory Subcommittee, 1994-2004
 Board of Trustees, Lake Forest College, Illinois, 1989-2001
 Board for International Food and Agricultural Development (BIFAD), USAID, 1995-2001
 USDA National Research, Educational, and Extension Advisory Board, 1998-2001
 PI, Director, NASA Tuskegee University Center for Food and Environmental Systems for Human Exploration of Space, 1985-2005
 USAID, Scientific Liaison Officer, Asian Vegetable R & D Center, Taiwan, 1989-1997
 USDA Agricultural Biotechnology Research Advisory Committee, 1992-1996
 Visiting Scientist: NASA Kennedy Space Center, 1987; International Institute of Tropical Agriculture, Nigeria, 1985; Purdue University,
 Department of Agronomy, 1981

PATENTS

Morris, C., P. Loretan, C. Bonsi, W. Hill. 1989 and 1993. Moveable root contact/pressure plate assembly for hydroponic systems. U.S.
 Patent and Trade Office. Patent Nos. 4,860,490 and 5,216,836.

JOURNAL ARTICLES

Mortley D.G., Jun-Hyun Oh, D.S. Johnson, C.K. Bonsi, and W.A. Hill. 2012. Influence of harvest intervals on growth responses and
 fatty acid content of purslane (*Portulaca oleracea*) HortScience Vol 47(3):437-439.
 Huang, Z., B. Wang, D.G. Mortley, T. Mindingall, C.K. Bonsi, W.A. Hill, and C.E. Morris. 2011. Chemical characteristics of essential oil
 from five basil cultivars grown hydroponically in a controlled environment using the nutrient film technique. Intl. J. Applied Sci.
 Tech. Vol. 1 (6) 45-49.
 McArthur, J., W. Hill, G. Trammel, C. Morris. 2010. Gardening with youth as a means to develop science, work and life skills. Children,
 Youth and Environments 20:301-317.
 Mortley, D.G., S. Burrell, C.K. Bonsi, W.A. Hill, and C. E. Morris. 2009. Influence of Daily Light Period and Irradiance on Yield and Leaf
 Elemental Concentration of Hydroponically Grown Sweetpotato. HortScience 44: 1491-1493.
 Mortley, D.G., C.K. Bonsi, W.A. Hill, C. Morris, C.S. Williams, C.F. Davis, J.W. Williams, L.H. Levine, B.V. Peterson and R.M. Wheeler.
 2008. Influence of microgravity on environment on root growth, soluble sugars and starch concentration of sweetpotato stem
 cuttings. J. Amer. Soc. Hort. Sci. 133:327-32.
 Trotman, A., J., Barfus, C. Morris, W. Hill, et al., 2004. SLSTP: Developing human capital for space exploration through systematic
 scholarship. SAE Tech Paper Series 2004-01-2422
 Mortley, D.G., C.K. Bonsi, W.A. Hill and C.E. Morris. 2004. Temperature Influences Yield, Reproductive Growth, Harvest Index and Oil
 Content of Hydroponically Grown Georgia Red Peanut Plants. HortScience 39: 975-978.
 Mortley, D.G., C.K. Bonsi, W.A. Hill and C.E. Morris. 2003. Inverse temperature studies to reduce canopy growth of sweetpotato. SAE
 Technical Paper Series No. 2003-01-2679
 Mortley, D.G., C.K. Bonsi, W.A. Hill, C.E. Morris. 2002. Daily light period influences pod yield, harvest index and flowering of peanut
 grown in NFT. SAE Tech Paper Series 2002-01-2488.
 Mortley, D., J. Hill, C. Bonsi & W. Hill. 2001. Nutrient management of sweetpotato grown in NFT. Act Hort. 548:567-574.
 Mortley, D., J. Hill, D. Hileman, C. Bonsi & W. Hill. 2001. Light & CO2 interaction on peanut grown in NFT. Acta Hort 543:327-334.
 Mortley, D. G.J. H. Hill, C. K. Bonsi, W. A. Hill and C. E. Moms. 2001. Using mass balance techniques to manage nutrition of
 hydroponically-grown sweetpotato (*ipomoea batatas L*) Lam]. SAE Technical Paper Series No. 2001-01-2274.
 Mortley, D. G., J. H. Hill, C. K. Bonsi, W. A. Hill and C. E. Morris. 2001. Response of peanut (*Arachis hypogae L*) to increasing levels of
 blue light. SAE Technical Paper Series No. 2001- 01-2275.
 Mortley, D., C. Bonsi, P. Loretan, W. Hill and C. Morris. 2000. High relative humidity increases yield, harvest index, flowering, and
 gynophore growth of hydroponically grown peanut plants. HortScience, 35:46-48.
 Staniel, K., D. Mortley, D. Hileman, P. Loretan, C. Bonsi and W. Hill. 2000. Growth, pod and seed yield, and gas exchange of
 hydroponically grown peanut in response to CO2 enrichment. HortScience 35:49-52.
 Mortley, D.G., H.A. Aglan, C.K. Bonsi and W.A. Hill. 2000. Growth of sweetpotato in lunar and mars simulants. SAE Technical Paper
 Series No. 2000-01-2289.
 Rowell, T., D.G. Mortley, P.A. Loretan, C.K. Bonsi, and W.A. Hill. 1999. Continuous daily light period influence
 peanut yield in nutrient film technique. Crop Sci. 39:1111-1114.
 Aglan, H., D. Mortley, A. Trotman, P. Loretan, and W.A. Hill. 1998. Sweetpotato growth using a microporous tube system with lunar
 simulant medium. SAE Tech, Paper Ser. No. 981806.
 Shi, L., J.Y. Lu G. Jones, P.A. Loretan and W.A. Hill. 1998 Characteristics and composition of peanut oil prepared by an aqueous
 extraction method. Life Support and Biosphere Science, 5:225-229
 Trotman, A.A., P.P. David, C.K. Bonsi and W.A Hill. 1998. Comparison of the elemental composition of sweetpotato grown in a
 bioreactor effluent and modified Hoagland solution. Tropical Agriculture 75: (1) 35-38.
 Mortley, D.G., P.A. Loretan, W.A. Hill, C.K. Bonsi, C.E. Moms, R. Hall and D. Sullen. 1998. Biocompatibility of sweetpotato and peanut
 in a hydroponic system, HortSci 33:1147-1149.
 Trotman, A.A., P.P. David, C.K. Bonsi, W.A. Hill, D.G. Mortley, and P.A. Loretan. 1997. Integrating biological treatment of crop residue
 into a hydroponic sweetpotato culture. Adv. Space Res. 20:1805-1813.
 Wu, W., J. Y. Lu, A.R. Jones, D.G. Mortley, P.A. Loretan, C.K. Bonsi and W.A. Hill. 1997. Proximate composition, amino acid profile,
 fatty acid composition, and mineral content of peanut seeds hydroponically grown at elevated CO2 levels. J. Agric Food Chem 45:
 3863-3866.
 Mortley, D., J. Hill, P. Loretan, C. Bonsi, W. Hill. 1996. Elevated carbon dioxide influences yield and photosynthetic responses of
 hydroponically-grown sweetpotato. Acta Hort 440: 31-36.

- Mortley, D., P.A. Loretan, C.K. Bonsi, W.A. Hill, C.E. Moms. 1996. Growth responses of hydroponically grown sweet potato tolerant and intolerant of a continuous daily light period. *HortScience* 31:209-212.
- David, P. P., A. A. Trotman, D. G. Mortley, C. K. Bonsi, P. A. Loretan, and W. A. Hill. 1995. Foliage removal influences sweetpotato biomass yields in hydroponic culture. *HortScience* 30:1000-1002.
- Aglan, H., E. Smith, R. Tshitaha, D. Mortley, P. Loretan, W. Hill, and R. Prince. 1995. Engineering design analysis of a microgravity chamber with expandable boundaries for root crops. SAE Tech. Paper 951707
- Aglan, H., E. Smith, R. Tshitaha, D. Mortley, P. Loretan, W. Hill, and R. Prince. 1995. Microporous membrane nutrient delivery systems for sweetpotato in microgravity. SAE Tech. Paper 95108.
- Loretan, P.A., C.K. Bonsi, D.G. Mortley, R.M. Wheeler, C.L. Mackowiack, W.A. Hill, C.E. Morris, A.A. Trotman, and P.P. David. 1994. Effects of several environmental factors on sweetpotato growth. *Adv. Space Res.* 14:277-280.
- Mortley, D. G., C. K. Bonsi, P. A. Loretan, W. A. Hill, and C. E. Morris. 1994. Relative humidity influences yield, edible biomass and linear growth rate of sweetpotato grown hydroponically. *HortScience* 29:609-610.
- Bonsi, C. K., D. G. Mortley, P. A. Loretan, and W. A. Hill. 1994. Temperature and light effects on sweetpotatoes grown hydroponically. *Acta Hort.* 361:527-530.
- Mortley, D.G., C.K. Bonsi, W.A. Hill, P.A. Loretan, and C.E. Morris. 1993. Irradiance and nitrogen to potassium ratio influences sweetpotato yield in nutrient film technique. *Crop Sci.* 33:782-784.
- Grant, P.A., J.Y. Lu, D.G. Mortley, P.A. Loretan, C.K. Bonsi, and W.A. Hill. 1993. Nutrient composition of sweetpotato storage roots altered by frequency of nutrient solution change. *HortScience*. 28:802-804.
- Hill, W.A., D.G. Mortley, C.L. Mackowiack, P.A. Loretan, T.W. Tibbitts, R.M. Wheeler, C.K. Bonsi, and C.E. Morris. 1992. Growing root, tuber and nut crops hydroponically for CELSS. *Adv. in Space Res.* 12(5):125-131.
- Mortley, D.G., C.B. Smith, and K.T. Demchak. 1991. Fertilizer placement affects growth, fruit yield and elemental concentrations and contents of tomato plants. *J. Amer. Soc. Hort. Sci.* 116:659-662.
- Mortley, D.G., C.K. Bonsi, P.A. Loretan, C.E. Morris, W.A. Hill, and C.R. Ogbuehi. 1991. Evaluation of sweetpotato genotypes for adaptability to hydroponic systems. *Crop Sci.* 31:845-847.
- Mortley, D.G., P.A. Loretan, C.K. Bonsi, W.A. Hill, and C.E. Morris. 1991. Plant spacing influences yield and linear growth rate of sweetpotatoes grown hydroponically. *HortScience* 26:1274-1275.
- Mortley, D.G. and W.A. Hill. 1991. Root and foliage yield and N content of fertilizer N independent and dependent sweetpotato. *J. Root Crops.* 17:79-84.
- Mortley, D.G., and W.A. Hill. 1990. Sweetpotato growth and nitrogen content following nitrogen application and inoculation with *Azospirillum*. *HortScience* 25:758-759.
- Hill, W.A., H. Dodo, S. K. Hahn, K. Mulongoy, and S. O. Adeyeye. 1990. Sweet potato root and biomass production with and without nitrogen fertilization. *Agronomy Journal* 82:1120-1122.
- Loretan, P., C. Bonsi, W. Hill, C. Ogbuehi, D.G. Mortley, J. Lu, C. Morris and R. Pace. 1989. Sweetpotato growth parameters, yield components and nutritive value for CELSS applications. *J. Aerospace.* 98:1090-1094.
- Hill, W., P. Loretan, C. Bonsi, C. Morris, J. Lu, C. Ogbuehi. 1989. Utilization of sweetpotatoes in controlled ecological life support systems. *Adv. in Space Research* 9 (8) 29-41.
- Crossman, S. M., and W. A. Hill. 1987. Inoculation of sweet potato with *Azospirillum*. *HortScience* 22(3):420-422.
- Hill, W. A., T. Simpson, M. Collins, E. Counce, W. Frye, K. Hillsman. 1984. Soil Judging Coaches Workshop. *J. Agron. Educ.* 13: 7-12.
- Hill, W.A., P. Bacon, S.M. Crossman, and C. Stevens. 1983. Characterization of N₂-fixing bacteria associated with sweet potato roots. *Canadian Journal of Microbiology* 29: 860-862
- Quamina, J. E., B. R. Phills and W. A. Hill. 1982. Vine production from tuber pieces of various sizes and sections of yam. (*Dioscorea alata* L.). *HortSci.* 17(1): 73-74.
- Quamina, J. E., W. A. Hill and B. R. Phills. 1981. Comparative development of vine cuttings and rooted tuber sprouts from yam. (*Dioscorea alata* L.). *HortSci.* 16(6): 777
- Hill, W. A. 1979. A unit on comparative soil taxonomy for introductory courses in soil classification. *J. Agron. Educ.* 8:33-37.
- Hill, W. A. and H. L. Bohn. 1974. A simple and quantitative greenhouse laboratory method for injecting gases into soil. *Soil Sci. Amer Proc* 38:148
- Hill, W. A., H. L. Bohn and G. V. Johnson. 1974. White phosphorous-ammonia reaction product as a phosphatic fertilizer in limed acid and alkaline soils. *Agron. J.* 66:115-

BOOKS AND MONOGRAPHS

- Hill, W.A., Mortley, D., Bonsi, C. (eds.). *Eureka Moments: 20 Years of Research and Education in Food and Environmental Systems for Human Exploration of Space*. Tuskegee University (In press, Spring 2013).
- Tackie, N., R. Zabawa, N. Baharanyi and W. Hill (eds.). 2010. *Facing Global Crisis: Local solutions to Energy, Food and Persistent Poverty*. Tuskegee Univ., AL. pp. 279.
- Jordan, J., E. Pennick, W.A. Hill and R. Zabawa. 2009 (eds.). *Land & Power: Sustainable Agriculture and African Americans*. Sustainable Agriculture Publications, Waldorf, MD. pp. 216.
- Tackie, N., R. Zabawa, N. Baharanyi and W. Hill (eds.). 2008. *Energy, Food and fiber Alternatives: Opportunities for Underserved Communities*. Tuskegee Univ., AL. pp. 136.
- Tackie, N., R. Zabawa, N. Baharanyi, and W. Hill (eds.). 2007. *Strategies to Influence the 2007 Farm Bill and Rural Policies: Impact on Diverse Cultures, Rural Communities and Underserved Farmers*. Tuskegee Univ., AL. pp. 217.
- Tackie, N., N. Baharanyi, R. Zabawa, and W. Hill (eds.). 2006. *Meeting the Challenges to Sustainable Growth and Development of Rural Communities*. Tuskegee Univ., AL. pp. 166.
- Hill, W., et al., 2003. *Persistent Poverty in the South*. Southern Food Systems Education Consortium, Tuskegee Univ., pp. 20.
- Zabawa, R., N. Baharanyi, W. Hill (eds.). 2004, 2002, 2001 (Series). *Land, Community & Culture: African American-Asian American Connections* [pp. 170]; *African American-Hispanic American/Latino Connections* [pp. 154]; *African American, Native American/Native Alaskan Connections* [pp. 170], Tuskegee Univ.
- Stowe, B., J. Glover, W. Hill, D. Jolly, C. Monette, R. Paige and S. Rasmussen. 2000. *Research and Education Recommendations for Small Farms*. USDA National Agricultural Res., Ext., Educ. & Econ. Advisory Board, pp. 12.
- Zabawa, R., N. Baharanyi, W. Hill (eds.). 2000. *Global Food Security: Exploring the Nexus Between Domestic and International Strategies*, Tuskegee Univ., AL, pp. 228.
- Baharanyi, N., R. Zabawa, and W. Hill. 2000. *Innovative Strategies for viable small farm and rural communities*. Tuskegee, University, AL, pp. 166.
- Baharanyi, N., R. Zabawa, W. Hill. (eds.). 1998. *Access & Equity Issues in Agriculture & Rural Development*. Tuskegee University, AL, pp.333.

- Baharanyi, N., R. Zabawa & W. Hill. (eds.). 1997. Natural Resources and the Environment: Community Development Issues. Tuskegee University, AL, pp. 321.
- Zabawa, R., N. Baharanyi and W. Hill. (eds.). 1996 The 1995 Farm Bill: issues and implications for rural communities. Tuskegee University, AL pp. 163.
- Zabawa R., N. Baharanyi, W. Hill (eds.). 1995. Local communities and sustainable development. Tuskegee University, AL, pp. 287.
- Hardy, R.W.F., R.H. Burris, F.J. DeBruijn, J. Dobereiner, A. R.J. Eaglesham, W.A. Hill, et al. 1994. Biological N fixation research challenges. National Research Council/National Academy Press, Washington, D.C., pp. 51.
- Baharanyi, N., R. Zabawa, W. Hill (eds.) 1994. Rural development and a changing USDA. Tuskegee University, AL. pp. 234.
- Hartwood, R., M. Carter, R. Gomez, S. Gliessman, A. Gomez-Pompa, L. Hardin, W. Hill, et al. 1993. Sustainable Agriculture and the Environment in the Humid Tropics, National Research Council/National Academy Press, Washington, D.C., pp. 702.
- Zabawa, R. Baharanyi, N. and W. Hill. 1993. Challenges in agriculture and rural development. Tuskegee University, AL, pp. 298.
- Baharanyi, N. R. Zabawa and W. Hill (eds.). 1993. Focus on black belt counties: life conditions and opportunities. Southern Rural Development Center, Publication 176, pp. 83.
- Baharanyi, N., R. Zabawa and W. Hill. 1992. New directions in local and rural development. Tuskegee University, AL, pp. 221.
- Hill, W., P. Loretan, C. Bonsi (eds.). 1992. Sweetpotato technology for the 21st century. Tuskegee University, AL, p. 635.
- Baharanyi, N., R. Zabawa, A. Maretzki and W. Hill (eds.). 1991. Public and private partnerships for rural development. Tuskegee University, AL, pp. 291.
- Baharanyi, N., R. Zabawa and W. Hill (eds.). 1990. Outreach to the rural disadvantaged: issues and strategies for the 21st century., Tuskegee University, AL, pp. 247.
- Williams, T.T., W.A. Hill and R.D. Christy (eds.) 1989. Rural development issues of the nineties: perspectives from the social sciences. Tuskegee University, AL, pp. 210.
- Hill, W., P. Loretan, C. Bonsi (eds.). The Sweetpotato for Space Missions. 1984. Tuskegee University. pp.66

BOOK CHAPTERS AND PROCEEDINGS

- Mortley, D.G., J.H. Hill, D. Hileman, D. Barta, C.K. Bonsi, W.A. Hill and C.E. Morris. 2008. Sweetpotato and human exploration of space: some observations from NASA-sponsored controlled environment studies. In: Recent Advances in Agriculture: Research Signpost, Trivandrum, India. p. 331-347.
- Hill, W.A., 2007. Enhancing Small and Minority Farm Profitability and Rural Community Viability through New Partnerships. In: Knutson, Knudson and Ernstes (eds.) Perspectives on 21st Century Agriculture - A Tribute to Walter J. Armbruster. Farm Foundation. p. 45-55.
- Mortley, D.G., J.H. Hill, C.K. Bonsi, A.A. Trotman, and W.A. Hill. 2000. Response of sweetpotato grown in nutrient film technique (NFT) to blue light. Proc. Caribbean Food Crops Soc.
- Mortley, D.G., J.H. Hill, A.A. Trotman, P.A. Loretan, C.K. Bonsi, W.A. Hill, C.E. Morris. 1998. Proc Food Crops Society 34: 95- 98.
- Mortley, D.G., P.P. David, C.K. Bonsi, P.A. Loretan, and W.A. Hill. 1998. Sweetpotato production using the nutrient film technique. Proc. Intl. Workshop on Sweetpotato Production System toward the 21st Century. Miyakonojo, Miyazaki, Japan, 215-224.
- Mortley, D. G., P. A. Loretan, C. K. Bonsi, W. A. Hill and C. E. Morris. 1994. Frequency of nutrient solution changes affects yield, elemental concentration and water use of sweetpotato grown by use of nutrient film technique. Proc., Sino-Intl. Colloquium on Soilless Culture, Hangzhou, China, May 22-24. p. 122-129.
- Bonsi, C. K., P. J. C. Bouwkamp, W. A. Hill and P. A. Loretan. 1992. Production Practices. In: A. Jones and J. C. Bouwkamp (Eds.) Fifty Years of Cooperative Sweetpotato Research 1939-1989. Southern Coop. Series. Bull. No. 369 pp. 22-41
- Bonsi, C. K., J. C. Bouwkamp, W. A. Hill and P. A. Loretan. 1992. Production practices. In: A. Jones and J. C. Bouwkamp (Eds.) Fifty Years of Cooperative Sweetpotato Research. 1939-1989. Southern Cooperative Series Bull. p. 29-43
- Bonsi, C. K, W. A. Hill, D. G. Mortley, P. A. Loretan, C. E. Morris, and E. Carlisle. 1992. Growing sweetpotatoes for space missions using NFT. In Sweetpotato Technology for the 21st Century. p. 110-119.
- Carlisle, E. R., D. G. Mortley, P. A. Loretan, C. K. Bonsi, W. A. Hill, C. E. Morris, and A. A. Trotman. 1992. Effect of flow rate on hydroponically-grown sweetpotatoes. In Sweetpotato Technology for the 21st Century p. 160-161.
- Martinez, E. R., C. K. Bonsi, P. P. David, D. G. Mortley, W. A. Hill, P. A. Loretan, and C. E. Morris. 1992. Effect of constant pH vs. periodic pH adjustment of nutrient solution on yield of sweetpotato using NFT. In Sweetpotato Technology for the 21st Century p. 171-173.
- Mortley, D., C. Bonsi, P. Loretan, W. Hill, E. Carlisle, and C. E. Morris. 1992. Effects of relative humidity on sweetpotato growth in an NFT system. In Sweetpotato Technology for the 21st Century p. 173-177.
- Grant, P., J. Lu, D. Mortley, P. Loretan, C. Bonsi, W. Hill, and C. Morris. 1992. Nutritive composition of sweetpotatoes grown in NFT with different nutrient solution application protocols. In Sweetpotato Technology for the 21st Century p. 439-444.
- Bonsi, C. K., P. A. Loretan, D. G. Mortley, W. A. Hill, C. Ogbuehi, E. Martinez and C. E. Morris. 1991. Assessment of temperature and light effects on growth of sweetpotato using nutrient film technique (NFT). Fourth Triennial Symposium, International Society for Tropical Root and Tuber Crops - African branch, 2-8 Dec. 1982. Kinshasa, Zaire. p. 337-339.
- Loretan, P. A., C. K. Bonsi, D. G. Mortley, C. R. Ogbuehi, W. A. Hill and C. E. Morris. 1991. Effects of periodic harvesting of storage roots and shoot tips on growth and yield of sweetpotatoes grown hydroponically. Fourth Triennial Symposium. International Society for Tropical Root and Tuber Crops - African branch, 2-8 Dec. 1982. Kinshasa, Zaire. P. 321-344.
- Bonsi, C. K., P. A. Loretan, W. A. Hill, C. R. Ogbuehi and C. E. Morris. 1990. Effects of photoperiod and light intensity on growth and storage root production of sweetpotatoes. Proceedings, 8th Symposium of the International Society of Tropical Root Crops. Oct. 30-Nov. 5, 1988. Bangkok, Thailand. p. 515-519.
- Hill, W. A., C. K. Bonsi, P. A. Loretan, C. E. Morris, R. D. Pace and J. Y. Lu. 1990. Sweetpotatoes for space missions: a new approach for marketing. Proceedings, 8th Tropical Symposium of the International Society for Tropical Root Crops. October 30-Nov. 5, 1988, Bangkok, Thailand. p. 609-614.
- Hill, W. A., P. A. Loretan, C. K. Bonsi, D. G. Mortley, C. E. Morris, J. Y. Lu, R. D. Pace, C. Ogbuehi, P. K. Biswas, J. H. Hill, E. Martinez, E. Carlisle S. Adeyeye and D. Green. 1990. Space Agriculture: The work of Carver continues. In: Americans in Agriculture: Portraits of Diversity. 1990 Yearbook of Agriculture. p. 108-110.
- Loretan, P. A., C. E. Morris, C. K. Bonsi, W. A. Hill, R. D. Pace and J. Y. Lu. 1989. Sweetpotato production in hydroponic systems. Proceedings, ISOSC, Flevohof, Netherlands. p. 275.
- Ogbuehi, C., P. Loretan, C. Bonsi, W. Hill, C. Morris, P. Biswas, D. Mortley. 1989. Effect of bi-weekly shoot tip harvests on the growth & yield of GA Jet sweetpotato grown hydroponically. Proc. NASA-HBCU Space Science & Engineering Research Forum. P. 9-14.
- Hill, W. A. and C. K. Bonsi. 1987. Root Crop Breeding. In: Congress, Office of Technology Assessment, Enhancing Agriculture in Africa: A Role for U. S. Development Assistance (Volume 2, Part D), National Technical Information Service, Springfield, VA

- Morris, C., E. Martinez, C. Bonsi, D. Mortley, W. Hill, C. Ogbuehi and P. Loretan. 1989. Effect of channel size on sweetpotato storage root enlargement in the Tuskegee University hydroponic system. Proc. NASA-HBCU Space Science and Engineering Research Forum. p. 15-19.
- Loretan, P., C. Bonsi, D. Mortley, C. Ogbuehi, W. Hill and C. Morris. 1989. Effects of periodic harvesting of storage roots and shoot tips on growth and yield of sweetpotatoes grown hydroponically. Proc. 4th Triennial Symp. Intl. Soc. Tropical Root Crops - Africa Branch, Dec. 4-8, 1989, Zaire.
- Bonsi, C., P. Loretan, D. Mortley, W. Hill, C. Ogbuehi, E. Martinez, and C. Morris. 1989. Temperature and light effects on growth of sweetpotatoes using NFT. 4th Triennial Symp. Intl. Soc. Tropical Root Crops - Africa Branch, Dec. 4-8, 1989, Zaire.
- Hill, W.A. 1989. Sweet potato. P. 169-188. In: D.L Plucknett and H. Sprague (eds.) Detecting mineral nutrient deficiencies that effect crop production in temperate and tropical regions. Westview press, Boulder CO.
- Biswas, P. K., W. A. Hill, and C. K. Bonsi. 1984. Physiology of the sweetpotato. In: Hill, W. A., P. A. Loretan and C. K. Bonsi (eds.). The Sweetpotato for Space Missions. Carver Research Foundation of Tuskegee University, Tuskegee, AL p. 13-17.
- Bonsi, C. K., P. A. Loretan, W. A. Hill, J. R. Allen, P. K. Biswas, R. D. Pace, B. R. Phillips, C. Stevens and M. E. Tolbert. 1984. Research needs for sweetpotato production on space missions. In: Hill, W. A., P. A. Loretan and C. K. Bonsi (eds.). The Sweetpotato for Space Missions. Carver Research Foundation of Tuskegee University, Tuskegee, AL. p. 27-29.
- Hill, W.A., D.G. Mortley, and S. M. Crossman. 1985. Fertilizer N independent and dependent sweetpotato cultivars. Proc. 7th Intl. Symp. on Tropical Root Crops. pp. 703-713. (*Outstanding Research Paper Award, ISTRC, 1983*)
- Hill, W.A. 1984. Effect of nitrogen nutrition on quality of three important root/tuber crops. p. 627-641. In: R.D. Hauck (ed.) Nitrogen in crop production. American Society of Agronomy, Soil Science Society of America and Crop Science Society of America, Madison, WI.
- Hill W.A. and P. Bacon. Fertilizer N use efficiency and associative N₂-fixation of sweet potato. p. 533-542. Proc. 6th Int. Symp. Tropical Root Crops, International Potato Center (CIP), Lima Peru, 21-26 Feb 1983.
- Hill, W.A. and S.M. Crossman. 1984. Evidence for associative N₂-fixation in sweet potato. P. 1670170. 1st Caribbean Workshop on Tropical Root Crops, University of West Indies, Kingston, Jamaica, 10-16, Apr 1983.
- Hill, W.A. Mobilizing small farmers to meet the world food crisis – conference summary. P. 73-80. Proc. Tuskegee Institute Small Farmers conference, Carver Research Foundation, Tuskegee University, 13-15 February 1983.
- Hill, W.A. 1984. Selection of root and tuber crops for space missions. P. 6-15. In: W.A. Hill, P. Loretan and C.K. Bonsi (eds.) The sweet potato for space missions. Carver Research foundation, Tuskegee University, Tuskegee, AL.
- Biswas, P.K., W.A. Hill and C.K. Bonsi. 1984. Physiology of the sweet potato. P. 20-23. In: W.A. Hill, P. Loretan and C.K. Bonsi (eds.) The sweet potato for space missions. Carver Research foundation, Tuskegee University, Tuskegee, AL.
- Hill, W.A. 1984. Crop production in hydroponic systems. P. 54-60. In: W.A. Hill, P. Loretan and C.K. Bonsi (eds.) The sweet potato for space missions. Carver Research foundation, Tuskegee University, Tuskegee, AL.
- Phills, B.R. and W.A. Hill. 1984. Macro propagation of the sweet potato. p. 24. In: Selection of root and tuber crops for space missions. In: W.A. Hill, P. Loretan and C.K. Bonsi (eds.) The sweet potato for space missions. Carver Research foundation, Tuskegee University, Tuskegee, AL.
- Bonsi, C.K., P.A. Loretan, W.A. Hill, J.R. Allen, P.K. Biswas, J.H.M. Henderson, J.Y. Lu, R.D. Pace, B.R. Phills, C. Stevens and M.E.M. Tolbert. 1984. Research needs for sweet potato production on space missions. p. 63-66. In: W.A. Hill, P. Loretan and C.K. Bonsi (eds.) The sweet potato for space missions. Carver Research foundation, Tuskegee University, Tuskegee, AL.
- Hill, W.A., P.B. Rodney and L.G. Graham. 1980. Associated N₂-fixation of sweet potato. In: current perspectives in nitrogen fixation. 489. Australian Academy of Sci., Canberra, Australia.
- Fangmeier, D.D., R.E. Briggs, J.L. Abbot and R.A. Mohammed, W.A. Hill and R.W. Henry. 1974. Water and fertilization management of short season, high density cotton. Cotton Report, Series p. 32, college of Agriculture, University of Arizona, pp. 83-87.

SELECTED AWARDS/HONORS/LEADERSHIP

Honor Societies: Phi Beta Kappa, Sigma Xi, and Gamma Sigma Delta

Lighthouse Award, 2011, Black Belt Community Foundation, Community Associates

Distinguished Achievement in Agriculture Award of Merit, 2010, Gamma Sigma Delta

Lifetime Service Award, 2007, Rural Coalition; Humanitarian Award, 2007, Rural Advancement Fund

Honoring Ten -Tribute, 2006, Southern Rural Development Initiative (SRDI)

Service to Agriculture Award, Alabama Farmers Federation, 2005; Award of Honor, Farm Credit Bank of Texas, 2005

Diversity Award, Council on Chemical Research, 2004; Irving Outstanding Leadership Award, ADEC, 2004

Honorary Doctorate of Science Degree, Lake Forest College (LFC), Illinois, 2001; Alumni Distinguished Service Citation, LFC, 1986

USDA Award for Superior Service, Distinguished Scientific Research, 1996; Carver Recognition Team, 2000

Leadership and Administration Award, American Society for Horticultural Science Southern Region, 1997

African American Achiever in Agriculture, Chicago Museum of Science and Industry, 1996

Alumni Merit Award, University of Illinois, College of Agriculture, 1995

R.W. Brown Distinguished Scientist Research Award, Sigma Xi Scientific Honor Society, 1991

Fellow, American Society of Agronomy (ASA), 1992; Outstanding Minority Educator Award, ASA, 1990

Futurist in Science and Technology, Black Enterprise Magazine, 1990

Kellogg Fellow, National Center for Food and Agricultural Policy, 1988

Faculty Award for Excellence in Science and Technology, The White House Initiative on HBCU's, 1988

Faculty Achievement Award, Tuskegee University, 1985

Distinguished Scholar Award, United Negro College Fund/MacArthur Foundation, 1984

Distinguished Service Award for Faculty Advisement, G.W. Carver Plant and Soil Science Club, 1982

Plucknett Outstanding Research Paper Award, International Society of Tropical Root Crops, 1983

Danforth Associate, for Excellence in Undergraduate Teaching, Danforth Foundation, 1980

Excellent Rating as a Science Teacher, Chicago Board of Education, 1971

Ford Foundation Fellowship, University of Chicago, 1968-70

Iron Key (Leadership) Honor Society, Lake Forest College, 1968

Academic Scholarship, Lake Forest College, 1964-68

Lettered in Basketball, Lake Forest college, 1964-67