

Publications for Prof. P. Umaharan

Book Chapters

Butler, D.R and Umaharan, P. (2004). Working with Cocoa Germplasm. In: Flood, J., Murphy, R. (eds.) Cocoa Futures: a source book of some important issues facing the cocoa industry. Chinchina (Colombia). CABI-FEDERACAFE, USDA, 164 pages. (ISBN 958-97441-7).

Monographs

Umaharan, P. (2004). 'A Biosafety Regulatory Framework for the Caribbean: Regulatory authorities, -systems and -guidelines' NIHERST, Trinidad and Tobago.

Adams, H, Umaharan, P., Brathwaite, R.A.I., Mohammed, K (2007). Hotpepper production manual for Trinidad and Tobago. CARDI, St. Augustine, Trinidad.

Research Articles:

Articles published (Refereed Journals):

- (1) Umaharan, P., Kanesharatnam, S., Sandanam, S and Vivekanandan, K. (1985). Effect of rooting media on the early growth of three fuel wood species in the Nursery. Sri Lanka Forester 16 (1&2): 36-42.
- (2) Umaharan, P. Ariyanayagam, R.P. and Haque, S.Q. (1997). Resistance to Cowpea Severe Mosaic virus, determined by three dosage dependent genes in *Vigna unguiculata* L. Walp. Euphytica 95: 49-55.
- (3) Umaharan, P. Ariyanayagam, R.P. and Haque, S.Q. (1997). Effect of short-term waterlogging applied at various growth phases on growth, development and yield in *Vigna unguiculata*. Journal of Agricultural Science (Cambridge) 128; 189-198.
- (4) Umaharan, P. Ariyanayagam, R.P. and Haque, S.Q. (1997). Pod quality characteristics in vegetable cowpea (*Vigna unguiculata* L. Walp) and their inheritance. Scientia Horticulturae (The Netherlands) 70:281-292
- (5) Umaharan, P. Ariyanayagam, R.P. and Haque, S.Q. (1997). Genetic analysis of yield and its components in vegetable cowpea (*Vigna unguiculata* L. Walp). Euphytica 96:207-217.
- (6) Umaharan, P., Ariyanayagam, R.P. and Haque, S. Q. (1997). Response of cowpea genotypes (*Vigna unguiculata* L. Walp) to artificial pollination in the tropics. Tropical Agriculture 74 (1): 39-44.
- (7) Umaharan, P., Ariyanayagam, R.P. and Haque, S.Q. (1997). Genetics of pod quality characteristics in vegetable cowpea (*Vigna unguiculata* L. Walp). Tropical Agriculture (Trinidad) 74 (4): 277-284.
- (8) Umaharan, P., Haque, S.Q. and Ariyanayagam, R.P. (1997). Identification of Resistance to Cowpea Severe Mosaic Virus in Cowpea (*Vigna unguiculata* L. Walp). Tropical Agriculture (Trinidad) 74 (4): 324-328.
- (9) Iwaro, D.A. Sreenivasan, T.N. and Umaharan, P. (1997). Phytophthora resistance in cacao - influence of pod morphological characteristics. Plant Pathology 46: 557-565.
- (10) Iwaro, D. A., Sreenivasan, T. N. and Umaharan, P. (1997). Foliar resistance to *Phytophthora palmivora* as an indicator of pod resistance in *Theobroma cacao*. Plant Disease 81 (6): 619-624.

- (11) Iwaro, D. A., Umaharan, P. and Sreenivasan (1997). Genetic basis of foliar resistance to *Phytophthora palmivora* in cacao (*Theobroma cacao* L.). *Euphytica* 97: 377-383.
- (12) Iwaro, A.D., Sreenivasan, T.N. and Umaharan, P. (1998). Cacao resistance to *Phytophthora*: Effect of pathogen species, inoculation depths and pod maturity. *European Journal of Plant Pathology* 104: 11-15.
- (13) Iwaro, A.D., Sreenivasan, T.N. and Umaharan, P. (1998). Mode of penetration of cocoa leaves by *Phytophthora palmivora* Butl. (Butl.). *Tropical Agriculture (Special Edition). Advances in Tropical Agriculture in the 20th century and prospects in the 21st century.* pp 321-322.
- (14) Mohamed, El, M. Umaharan, P. and R.H. Phelps (1997). The effect of genotype, seedling age and inoculation method on bacterial wilt resistance in tomato (*Lycopersicon esculentum*). *CAJANAR* 1(2): 1-7.
- (15) Mohamed, El, M. Umaharan, P. and R.H. Phelps. (1997) The genetic nature of bacterial wilt resistance (C.A. *Pseudomonas solanacearum* E.F. Smith) in Tomato (*Lycopersicon esculentum* Mill. *Euphytica* 96: 323-326.
- (16) Umaharan, P., Ariyanayagam, R.P and S.Q. Haque (1998). Genetic nature of some pod quality characteristics in vegetable cowpea (*Vigna unguiculata* (L.) Walp.). *Trop. Agric. (Trinidad)* 74: 277-284.
- (17) Umaharan, P., S.Q. Haque and R.P. Ariyanayagam (1998). Identification of resistance to cowpea severe mosaic virus (Trinidad isolate) in cowpea (*Vigna unguiculata* (L.) Walp). *Trop. Agric.* 74 (4): 324-328.
- (18) Fakir, S.A., C.R. McDavid and P. Umaharan (1998). Rooting systems in Pigeonpea. *Tropical Agric. (Trinidad)* 75: 390-394
- (19) Fakir, S.A., Umaharan, P. and C.R. McDavid (1998). A modified method of estimating abscission in pigeonpea. *Trop. Agric.* 75: 393-395
- (20) Umaharan, P., Padidam, M., Phelps, R.H., Beachy, R.N., and Fauquet, C.M. (1998). Distribution and Diversity of Geminiviruses in Trinidad and Tobago. *Phytopathology* 88: 1262-1268.
- (21) Surujdeo-Maharaj, S., Umaharan, P. and A.D. Iwaro. (2001). A study of genotype-isolate interaction in cacao (*Theobroma cacao* L.): resistance of cacao genotypes to isolates of *Phytophthora palmivora*. *Euphytica* 118: 295-303.
- (22) Ramsubhag, A. Donawa, A. and Umaharan, P. (2002). Variation in nodulation and nitrogen fixing characteristics of 18 slow growing rhizobia isolates on two genotypes of pigeonpea (*Cajanus cajan* L. Millsp. *Trop. Agric.* 79 (1): 12-20.
- (23) Ramsubhag, A and P. Umaharan (2002). Numerical taxonomy and molecular characterization of slow growing pigeonpea (*Cajanus cajan* L. Millsp) nodulating rhizobia". *FEMS Microbiol.Lett* 178 (2): 235-242.
- (24) Rampersad, S and Umaharan, P. (2003). Identification of resistance to PYMV-TT among accessions of *Lycopersicon* spp. *Plant Disease.* 87 (6): 686-691
- (25) Roberts, C., Ramsubhag, A and Umaharan, P. (2003). The impact of tissue culture on agriculture in the English speaking Caribbean. *Insular* 12 (1): 11-16.
- (26) Rampersad, S.N., Umaharan, P. (2003) Detection of Begomoviruses in Clarified Plant Extracts: A Comparison of Standard, Direct-Binding, and Immunocapture Polymerase Chain Reaction Techniques. *Phytopathology* 93 (9): 1153-1157.

Umaharan, P. (2001). Genetically Modified Organisms: issues facing Caribbean consumers. Paper presented at the 4th Caribbean Consumer Conference entitled " Consumer Participation in the 21st Century". Cascadia Hotel, Port of Spain, Trinidad and Tobago. June 27-29, 2001.

Umaharan, P. (2002). A conceptual framework for a biosafety system: A Caribbean perspective. Presented to the Planning division, Ministry of Agriculture, food and Marine resources. July, 2002.

Umaharan, P. (2003). A biosafety system – considerations for Trinidad and Tobago. Presented to the Cabinet appointed committee on biosafety. July, 03.

Umaharan, P. (2003). Genetically Modified Organisms and Biosafety. Workshop on the review of the 1996 Barbados Programme of Action (BPOA) for Small Island Developing States (SIDS). The Caribbean Network for Integrated Rural Development. The Conference Centre, Cascadia Hotel. Oct 3-5, 2003.

Umaharan, P. (2003). Genetically modified organisms and genetically modified food – Issues for Trinidad and Tobago and the Caribbean. The University of the West Indies, St. Augustine campus.

Conferences on GMOs and Biosafety attended:

"Regional Biotechnology Consultative Meeting: Charting a future for cooperation in the regulation of GMOs in LAC. Brasilia from 22 to 25 July 2003. UNIDO.

