Curriculum Vitae

Ali M Idris

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Education

1992-97	PhD in Plant Sciences (virology), University of Arizona, Tucson, Arizona
1990-91	MS in Crop Sciences (Plant Protection, virology), Agricultural University, Wageningen, The Netherlands

Professional Affiliation

1. American Pytopathological Society (APS)
2. Virology committee, American Pytopathological Society
3. University of Arizona Whitefly Working Group, College of Agriculture.

Employment

(A) Teaching Experience

08/02-12/07	Lecturer, School of Plant Sciences, University of Arizona, Tucson, Arizona
08/02-12/06	Adjunct Faculty, School of Biology, Pima Community College, East Campus, Tucson, Arizona
01/92-05/97	Teaching Associate, School of Plant Sciences, University of Arizona, Tucson, Arizona

(B) Research Experience

07/12 to present	Senior Research Scientist, Center for Desert agriculture, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia.
07/09-07/12	Team Leader, Plant Stress Genomic Research Center, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia.
07/06-06/09	Assistant Research Scientist, School of Plant Sciences, University of Arizona, Tucson, Arizona
05/97-07/06	Research Associate (virology), School of Plant Sciences, University of Arizona, Tucson, Arizona
01/92-05/97	Student Research Associate, School of Plant Sciences, University of Arizona, Tucson, Arizona
06/86-12/89	Assistant Research Scientist, Botany and Plant Pathology Section, Gezira Research Station, Agricultural Research Corporation, Wad Medani, Sudan.
07/83-05/86	Assistant Entomologist, Gezira Board, Wad Medani, Sudan.

Thesis and Dissertation

Idris, AM (1997). Biological and Molecular differentiation of subgroup III Geminiviruses. PhD, dissertation, School of Plant Sciences, University of Arizona, Tucson Arizona. 156pp.

Idris, AM (1991) Host range studies, and virus-vector relationships of Sinaloa tomato leaf curl virus: a whitefly-borne virus from Mexico. MS thesis, Department of Plant Virology, Agricultural University, Wageningen, The Netherlands. 40pp.

Departmental and Campus Involvement

1. Member, First International Graduate Student Meeting Committee, 1993. School of Plant Sciences, University of Arizona.
2. Chair, Crop Science Student Committee, 1990/91, Agricultural University, Wageningen, The Netherlands.
3. Student representative at the MS graduation ceremony, 1991, Agricultural University, Wageningen, The Netherlands. Addressed the ceremony on behalf of graduates.
4. Student member, Committee on Master of Science, 1990/91, Agricultural University, Wageningen, The Netherlands. Recommendations accepted by the Rector of the Agricultural University.

Peer-reviewed Journal Articles

1. **Idris**, **AM**, NM Abdullah and JK Brown 2012. Leaf curl diseases of two solanaceous species in Southwest Arabia are caused by a monopartite begomovirus evolutionarily most closely related to a species from the Nile Basin and unique suite of betasatellites. **Virus Research** 169:296-300.
2. **Idris**, **AM**, M.S. Shahid, RW Briddon, AJ Khan, J-K Zhu and JK Brown 2011. An unusual alphasatellite associated with monopartite begomoviruses attenuates symptoms and reduces betasatellite accumulation. **Journal of General Virology** 92:706-717.
3. Brown, JK, K. Mills-Lujan and **AM Idris** 2011**.** Phylogenetic analysis of *Melon chlorotic leaf curl virus* from Guatemala: Another emergent species in the *Squash leaf curl virus* Clade. **Virus Research** 158:257-262.
4. Papayiannis, LC, NI Katis, **AM Idris**, and JK Brown 2011. Identification of weed hosts of *Tomato yellow leaf curl virus* in Cyprus. **Plant Disease** 95:120-124.
5. **Idris, AM**, JR Tuttle, D Robertson, C Haigler, JK Brown 2010. Differential *Cotton leaf crumple virus*-VIGS-mediated gene silencing and viral genome localization in different *Gossypium hirsutum* genetic backgrounds. **Physiological and Molecular Plant Pathology** 75:13-22.
6. Rehman, M, JC Melgar, JMC Rivera **AM Idris** and JK Brown 2010. First Report of "*Candidatus* Liberibacter psyllaurous" or "*Ca.* Liberibacter solanacearum" Associated with Severe Foliar Chlorosis, Curling, and Necrosis and Tuber Discoloration of Potato Plants in Honduras. **Plant Disease** 94:376.
7. Brown, JK**,** M Rehman, RR Martin**,** and **AM Idris** 2010. First Report of "*Candidatus* Liberibacter psyllaurous" (synonym "*Ca*. L. solanacearum") Associated with 'Tomato Vein-

Greening' and 'Tomato Psyllid Yellows' Diseases in Commercial Greenhouses in Arizona. **Plant Disease** 94:376.

8. Hernandez-Zepeda, C, G Arguoello-Astorga, **AM Idris**, G Carnevali, JK Brown, OA Moreno-Valenzuela 2009. Molecular characterization and phylogenetic relationships of Desmodium leaf distortion virus (DeLDV): a new begomovirus-infecting *Desmodium glabrum* in Yucatan, Mexico. **Virus Gene** 39:371-374.
9. **Idris**, **AM**, K Mills-Lujan, K Martin, and JK Brown 2008. *Melon chlorotic leaf curl virus*: characterization and differential reassortment with closest relatives reveals adaptive virulence in the *Squash leaf curl virus* clade, and host shifting by the host-restricted *Bean calico mosaic virus*. **Journal of Virology** 82:1959-1967.
10. Tuttle, JK, **AM Idris**, JK Brown, CH Haigler, D Robertson 2008. Geminivirus-mediated gene silencing from *Cotton leaf crumple virus* is enhanced by low temperatures in cotton. **Plant Physiology** 148:41-50
11. Pietersen G, **AM Idris**, K Krüger, and JK Brown 2008. Characterization of *Tomato curly stunt virus*: a new tomato-infecting begomovirus from South Africa. **Plant Pathology** 57:809-818.
12. Khan, AJ, **AM Idris**, NA Al-Saady, MS Al-Mahruki, AM Al-Subhi, and JK Brown 2008. A divergent isolate of Tomato yellow leaf curl virus from Oman with an associated DNA satellite: an evutionary link between Asian and the Middle East virus-satellite complexes. **Virus Genes** 36:169-176.
13. **Idris**, **AM**, JC Guerrero, and JK Brown 2007. Two Distinct Isolates of *Tomato yellow leaf curl virus* Threaten Tomato Production in Arizona and Sonora, Mexico. **Plant Disease** 91:910.
14. **Idris**, **AM**, and JK Brown 2007. Genetic Diversity of *Cotton leaf crumple virus* in the Western Hemisphere. **Journal of Cotton Science** (*in press*).
15. Hernandez, C, **AM Idris**, G Carnevali, JK Brown, OA Moreno-Valenzuela 2007. Molecular characterization and experimental host range of Euphorbia mosaic virus-Yucatan Peninsula, a begomovirus species in the *Squash leaf curl virus* clade. **Plant Pathology** 56:763-770.
16. Hernandez, C, **AM Idris**, Carnevali, G, JK Brown, OA Moreno-Valenzuela 2007. Preliminary identification and coat protein gene phylogenetic relationships of begomoviruses associated with native flora and cultivated plants from the Yucatan Peninsula of Mexico. **Virus Genes** 35:825-833.
17. Hernandez, C, **AM Idris**, Carnevali, G, JK Brown, OA Moreno-Valenzuela 2007. Molecular characterization and phylogenetic relationships of two new bipartite begomovirus infecting malvaceous plants in Yucatan, Mexico. **Virus Genes** 35:369-377.
18. Brown, JK, JC Guerrero, M Matheron, M Olsen, and **AM Idris** 2007. Widespread Outbreak of *Cucurbit yellow stunting disorder virus* in Melon, Squash, and Watermelon Crops in the Sonoran Desert of Arizona and Sonora, Mexico. **Plant Disease** 91:773.
19. Baoli, Q, S Coats, R Shunxiang, **AM Idris**, X Caixia, and JK Brown 2007. Phylogenetic relationships of native and introduced *Bemisia tabaci* (Homoptera: Aleyrodidae) from China and India based on mtCOI DNA sequencing and host plant comparisons. **Progress in Natural Science** 17:645-654.
20. Isakeit, T, **AM Idris**, G Sunter, MC Black, and JK Brown 2007. *Tomato yellow leaf curl virus* in Tomato in Texas, Originating from Transplant Facilities. **Plant Disease** 91:466.

21. **Idris, AM**, A. Abdel-Salam, and JK Brown. 2006. Introduction of the New World *Squash leaf curl virus* to Squash (*Cucurbita pepo*) in Egypt: A Potential Threat to Important Food Crops. **Plant Disease** 90:1262.
22. Brown, JK, and **AM Idris**. 2006. Introduction of the Exotic Monopartite *Tomato yellow leaf curl virus* into West Coast Mexico. **Plant Disease** 90:1360.
23. Brown, JK, and **AM Idris** 2005. Genetic Differentiation of Whitefly *Bemisia tabaci* Mitochondrial Cytochrome Oxidase I, and Phylogeographic Concordance with the Coat Protein of the Plant Virus Genus *Begomovirus*. **Annals of the Entomological Society of America** 98: 827-837.
24. Brown, JK, **AM Idris**, KM Ostrow, R French, and DC Stenger 2005. Genetic and phenotypic variation of three strains of the *Pepper golden mosaic virus* complex. **Phytopathology** 95:1217-1224.
25. Fauquet, CF, S Sawyer, **AM Idris**, and JK Brown 2005. Sequence Analysis and Classification of Apparent Recombinant Begomoviruses Infecting Tomato in the Nile and Mediterranean Basins. **Phytopathology** 95:549-555.
26. **Idris, AM**, and JK Brown, 2005. Evidence for interspecific-recombination for three monopartite begomoviral genomes associated with the Tomato leaf curl disease from central Sudan. **Archives of Virology** 150:1003-10012.
27. **Idris, AM**, R Briddon, SE Bull, and JK Brown 2005. *Cotton leaf curl Gezira virus*-satDNAs represents a divergent, geographically- isolated Nile Basin lineage: Predictive identification of a satDNA REP binding motif. **Virus Research** 109:19-32.
28. **Idris, AM**, and JK Brown, 2004.Cotton leaf crumple virus is a distinct western hemisphere begomovirus species with complex evolutionary relationships indicative of recombination and reassortment. **Phytopathology** 94:1068-1074.
29. **Idris, AM**, E Hiebert, J Bird, and JK Brown 2003. Two newly described begomoviruses of *Macroptilium lathyroides* and common bean. **Phytopathology** 93: 774-783.
30. Briddon, RW, SE Bull, I Amin, AM Idris, S Mansoor, ID Bedford, P Dhawan, N Rishi, S Siwatch, Abdel-Salam, JK Brown, Y Zafar, and PG Markham, 2003**.** Diversity AM of DNA beta; a satellite molecule associated with some monopartite begomoviruses. Virology 312: 106-121.
31. **Idris, AM**, and JK Brown, 2002. Molecular analysis of cotton leaf curl virus-Sudan reveals an evolutionary history of recombination. **Virus Genes**: 24:249-256.
32. **Idris, AM**, J Bird, DM Rogan, and JK Brown 2002. Molecular characterization of *Rhynchosia mosaic virus*- Puerto Rico associated with symptomatic *Rhyncosia minima* and *Cajanus cajan* in Puerto Rico. **Plant Disease** 86:558.
33. Brown, JK, **AM Idris**, C Alteri, and DC Stenger 2002. Emergence of a new cucurbit-infecting begomovirus species capable of forming viable reassortments with *Squash leaf curl virus* cluster. **Phytopathology** 92:734-742.
34. **Idris, AM**, MH Hussein, AM Abdel-Salam, and JK Brown 2002. Phylogenetic relationships for okra leaf curl-and hollyhock leaf crumple-associated begomoviruses and first report of associated satDNAs. **Arab Journal of Biotechnology** 5: 67-82.
35. **Idris, AM**, S. Smith, and JK Brown 2001. Ingestion, transmission and persistence of *Chino Del tomate virus* (CdTV), a New World begomovirus, by Old and New World biotypes of the whitefly vector *Bemisia tabaci* (Genn). **Ann. Appl. Bioliology**139: 145-154.
36. **Idris, AM,** JK Brown 2001. Three previously unidentified begomoviral genomes from tomato exhibiting leaf curl diseases from central Sudan. **Plant Disease** 85:1209.

37. Bird, J, **AM Idris**, DM Rogan, and JK Brown 2001. Introduction of exotic *Tomato yellow leaf curl virus*-Israel in tomato to Puerto Rico. **Plant Disease** 85:1028.
38. Brown, JK, AM Idris, DM Rogan, MH Hussein, and M Palmieri 2001. *Melon chlorotic leaf curl virus*, a new begomovirus associated with Bemisia tabaci infestations in Guatemala. **Plant Disease** 85:1027.
39. Brown, JK, **AM Idris**, I Torres-Jerez, GK Bank, and SD Wyatt 2001. The core region of the coat protein gene is highly useful for establishing the provisional identification and classification of Begomoviruses. **Archive of Virology**146:1581-1598.
40. **Idris, AM**, and JK Brown 2000. Identification of a New, Monopartite Begomviruses Associated with Leaf Curl Disease of Cotton in Geizra, Sudan. **Plant Disease**. 84:809.
41. **Idris, AM**, and JK Brown 2000. Molecular analysis of Cotton leaf curl virus-Sudan reveals an evolutionary history of recombination. **Virus Genes** 24:249-256.
42. Pietersen, G, **AM Idris**, K Kruger, and JK Brown 2000. Tomato curly stunt virus, a New Begomovirus of Tomato within the yellow leaf curl virus-IS in South Africa. **Plant Disease** 84:810.
43. Brown, JK, **AM Idris**, MW Olsen, ME Miller, T Isakeit, and J Anciso 2000. *Cucurbit leaf curl virus*, a New Whitefly Transmitted Geminivirus in Arizona, Texas,, and Mexico. **Plant Disease** 84:809.
44. Brown, JK, KM Ostrow, **AM Idris**, and DC Stenger 2000. *Chino del tomate virus*: Relationships to Other Begomovirus and Identification of A-Component variants that Affect Symptom Expression. **Phytopathology** 84:546-552.
45. **Idris, AM**, J Bird, and JK Brown 1999. First Report of a bean-infecting begomovirus from *Macroptilium lathyroides* in Puerto Rico that is distinct from bean golden mosaic virus. **Plant Disease** 83:1071.
46. **Idris, AM**, S.H. Lee, and JK Brown 1999. First report of *Chino del tomate* and pepper hausteco geminiviruses in greenhouse-grown tomato in Sonora, Mexico. **Plant Disease** 83:396.
47. **Idris, AM**, G Rivas-Platero, I Torres-Jerez, and JK Brown 1999. First report of Sinaloa tomato leaf curls Geminivirus in Costa Rica. **Plan disease** 83:303.
48. Brown, JK, KM Ostrow, **AM Idris**, and DC Stenger 1999. Biotic, molecular, and polygenetic characterization of bean calico mosaic virus, a distinct Begomovirus species with affiliation in the squash leaf virus cluster. **Phytopathology** 89:273-280
49. Paxmadis, M, **AM Idris**, I Torres-Jerez, A Villarreal, MEC Rey, and JK Brown 1999. Characterization of tobacco geminiviruses in the Old the New World. **Archive of Virology** 144: 703-717
50. **Idris, AM**, and JK Brown 1998. Sinaloa Tomato Leaf Curl Geminivirus (STLCV): Biological and Molecular Evidence for a new subgroup III virus. **Phytopathology** 88:548-557
51. Brown, JK, **AM Idris**, and DC Fletcher 1993. Sinaloa tomato leaf curl virus, a newly described geminivirus of tomato and pepper in west coastal Mexico. **Plant Disease** 77:1262

Conference/Workshop Abstracts

1. **Idris**, AM, MA AL-Saleh, IM Al-Shawan, and JK Brown 2012. Molecular characterization of a natural intramolecular recombinant begomovirus with close relatives in southwestern Arabia. Phytopathology 102:SXX.

2. **Idris**, AM 2012. Epidemiology and genetic diversity of a begomovirus species in Arabia and the Nile Basin. Phylomedicine Symposium, Arizona State University.
3. **Idris**, AM and JK Brown 2010. Etiology of tomato yellow leaf curl disease complex in the Sultanate of Oman involves two helper begomoviruses, a betasatellite, and a DNA-2 satellite. Phytopathology 100:S53.
4. Hernández-Zepeda, C., AM **Idris**, and JK Brown 2010. Analysis of viral DNA accumulation in pepper plants with two different strains and chimeras of *Pepper golden mosaic virus*. Phytopathology 100:S50.
5. **Idris**, AM, B Ktenz, JR Tuttle, H Jeske, D Robertson, and JK Brown 2008. Construction of a virus-induced gene silencing (VIGS) vector for cotton using *Cotton leaf crumple virus* and a fragment of the cotton phytoene desaturase gene. Phytopathology 98:S70
6. Brown JK, NM Abdullah, AM **Idris** 2008. A begomovirus and suite of satellites associated with the leaf curl diseases of tomato and tobacco from Yemen are evolutionarily most closely related to begomoviruses from the Nile Basin. Phytopathology 98:S27
7. **Idris**, AM and JK Brown 2008. Association of the 'Distortion-Recovery Phenotype' in 'Anaheim' Pepper Systemically Infected with the Non-Whitefly Transmissible PepGMV-Distortion Strain (Di), with the BC1/Promoter Region. Fourth International Bemisia Workshop International Whitefly Genomics Workshop. 53pp. *Journal of Insect Science* 8:4, available online: insectscience.org/8.04
8. **Idris**, AM, and JK Brown 2007. A distortion-recovery (tolerance) caused by Di strain of Pepper golden mosaic virus in 'Anaheim' pepper apprears to be associated with a nono-coding sequence 5' to the BC1 ORF. Phytopathology 97:S49.
9. Hernández-Zepeda, C, JK Brown, AM **Idris**, G Carnevali, and O Moreno-Valenzuela 2007. Molecular characterization and phylogenetic relationships of *Desmodium leaf curl distortion virus* (DeLDV): A new begomovirus infecting *Desmodium glabrum*. Phytopathology 97:S46.
10. **Idris**, AM, and JK Brown 2007. Association of the 'disortion-recovery phenotype' in 'Anaheim" pepper systemically infected with the non-whitefly transmissible PepGMV-disortion strain Di, with the BC1/promoter region. International Geminivirus Symposium. Ouro Preto, Brazil. May 20-26, 2007, W5-2 page 43.
11. **Idris**, AM, J Bird, and JK Brown 2007. Infectivity of *Merremia mosaic virus* clones: A bipartite begomovirus from Puerto Rico. Phytopathogy 97:S174.
12. Brown, JK, and AM **Idris** 2007. Merremia leaf curl virus MeLCV and SPLCV: discovery of the first two monopartite begomoviruses from eudicots endemic to the Western Hemisphere. International Geminivirus Symposium. Ouro Preto, Brazil. May 20-26, 2007, W2-8 page 13.
13. **Idris**, AM, K Baumann, J Bird, and JK Brown 2005. Complete genome sequence of *Potato yellow mosaic virus* from Puerto Rico showed history of interspecies recombination and reassortment**.** Phytopathology 95:S46.
14. Hernández-Zepeda, C, JK Brown, AM **Idris**, G. Carnevali, and O. Moreno-Valenzuela 2005. Begomovirus diversity in malvaceous and other weed species, and cultivated crops in the Yucatán Península of México. Phytopathology 95:S42.
15. Mills, K. AM **Idris**, and JK Brown 2005. Characterization of *Melon chlorotic leaf curl virus*: Phylogeny and differential intermolecular reassortment with begomoviruses in the SLCV clad. Phytopathology 95:S70.

16. Baumann, K. AM **Idris**, J. Bird, and JK Brown 2005. *Merremia mosaic virus* is a newly described begomovirus species originating from indigenous weeds in PR and is recently adapted to tomato. Phytopathology 95:S7.
17. Khan, J. AM **Idris**, N. Al-Saady, M. Al-Mahruqi, A. Al-Aubhi, and JK Brown 2005. Identification of a monopartite begomovirus and a satellite DNA associated with symptomatic tomato in the Sultanate of Oman. Phytopathology 95:S62.
18. Brown, JK, K Baumann, and AM **Idris** 2005. Characterization of *Squash leaf curl* and *Squash mild leaf curl viruses*: Host range and reassortment for four SLCV clade viruses**.** Phytopathology 95:S14.
19. **Idris**, AM, K Mills, and JK Brown 2004. Characterization of infectious clones for *Melon chlorotic leaf curl virus*, and evidence of molecular recombination with other New World begomoviral species**.** Phytopathology 94:S43.
20. Brown, JK, K Baumann, and AM **Idris** 2004. Experimental host range and evidence for molecular recombination for infectious clones of *Squash leaf curl* and *Squash mild leaf curl* viruses. Phytopathology 94:S11.
21. **Idris**, AM, JK Brown, R. French, and D. C. Stenger 2003 Variation among isolates of *Pepper golden mosaic virus* suggests a begomovirus species complex**.** Phytopathology 93:S38.
22. Brown, JK, and AM **Idris** 2002. Cotton leaf crumple virus is the first member of a previously undiscovered phylogenetic group of New World begomoviruses. Phytopathology 92:S9.
23. **Idris**, AM, and JK Brown 2002. Begomovirus genomes associated with tomato leaf curl disease from the Nile Basin and evidence for interspecies recombination. Phytopathology 92:S38
24. Brown, JK, AM **Idris**, C. Alteri, and DC Stenger 2001. Infectious clones of *Cucurbit leaf curl virus* and viable reassortants with squash leaf curl viruses. Phytopathology 91:S11.
25. **Idris**, AM, and JK Brown 2001. Satellite DNAs associated with monopartite begomoviruses of malvaceous hosts in Sudan. Phytopathology 91:S41
26. **Idris**, AM, J Bird, and JK Brown 2001. Molecular characterization of infectious A and B components for *Macroptilium mosaic virus.* Phytopathology 91:S42
27. **Idris**, AM, and JK Brown 2000. Molecular characterization of full-length begomovirus DNAs from cotton, hollyhock, and okra in sudan in relation to epidemiology of cotton leaf curl disease-Sudan. Phytopathology 90:s37
28. **Idris**, AM, and JK Brown 2000. Molecular identification and phylogenetic relationships between cotton-infecting, Phytopathology begomoviruses from the Americas and their relationship to Old and New World begomoviruses of malvaceous hosts. Phytopathology 90:S10
29. Brown, JK, AM **Idris**, M. Olsen, ME Miller, and T Isakeit 2000. cucurbit leaf curl virus-a new begomovirus in Arizona, Texas, and Mexico. Phytopathology 90:S10
30. Brown, JK, AM **Idris**, LV Resende, and GE de Franca 2000. Four new begomovirus species of vegetable and weed hosts in Pernambuco and Sao Paulo, brazil. Phytopathology 90:S10
31. **Idris**, AM, J Bird, and JK Brown 1999. First report of a bean-infecting Begomovirus from Macroptilium lathyroides in Puerto Rico that is distinct from bean golden mosaic virus.
32. **Idris**, AM, SH Lee, EA Lewis, J. Bird, and JK Brown1998. Three tomato-infecting begomoviruses from Puerto Rico. Phytopathology. 88:S42.

33. Villarreal, A., AM **Idris**, I Torres-Jerez, and JK Brown1998. Molecular diversity of whitefly-transmitted geminiviruses of tobacco from Mexico. Phytopathology. 88:S92
34. Brown, JK, KM Ostrow, AM **Idris**, and DC Stenger 1998. Biotic, molecular, and phylogenitic characterization of bean calico geminivirus. Phytopathology 88:S11.
35. Brown, JK, KM Ostrow, AM **Idris**, and DC Stenger 1998. Molecular characterization and Koch's postulates for *chino del tomato geminivirus* with purified virions and full-length infectious clones. Phytopathology 88:S11
36. **Idris**, AM, and JK Brown 1997. Biological and molecular detection of subgroup III geminiviruses in plants and two whitefly vectors. Phytopathology 87:S46
37. **Idris**, AM, and JK Brown 1997. Molecular characterization of Sinaloa tomato leaf curl geminivirus, a new virus from Mexico. Phytopathology. 87:S46
38. **Idris**, AM, and JK Brown 1997. Frequencies of whitefly-mediated transmission and PCR detection of geminivirus DNA in two whitefly biological types. Silverleaf Whitefly 1997 Supplement to the 5-year National Research and Action: Progress Review, Technology Transfer, and new research and action plan 1997-2001. San Diego, California. pp 89
39. Brown, JK, SD Wyatt, GK Banks, PF McGrath, AM **Idris**, P Parker, and J Bird 1996. DNA sequence database for whitefly-transmitted geminiviruses from the U.S, Mexico, and Caribbean basin. Fourth Annual Progress Review of the 5-year National Research and Action Plan for Development of Management and Control Methodology for Silverleaf Whitefly. San Antonio, Texas. pp 14
40. **Idris**, AM, and JK Brown 1995. PCR-based detection of geminiviruses in two whitefly sectors. Phytopathology 85:1184
41. **Idris**, AM, GK Banks, and JK Brown 1994. Development of a diagnostic assay for whitefly-transmitted geminiviruses using PCR. Phytopathology 84:1086
42. **Idris**, AM, DC Fletcher, and JK Brown 1993. Identification and partial characterization of Sinaloa tomato leaf curl virus STLCV: a new whitefly- transmitted geminivirus affecting tomato and pepper from Sinaloa, Mexico. Phytopathology 83:692

References

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