

Preface to a special issue in memory of Gary Roy Bauchan (1954–2021)

Authors: Ochoa, Ronald, Cooper, Bret, Bolton, Sam, Mowery, Joe, and Dipalma, Antonella

Source: Systematic and Applied Acarology, 27(2) : 153-164

Published By: Systematic and Applied Acarology Society

URL: <https://doi.org/10.11158/saa.27.2.1>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Preface to a special issue in memory of Gary Roy Bauchan (1954–2021)

RONALD OCHOA¹, BRET COOPER¹, SAM BOLTON², JOE MOWERY¹ & ANTONELLA DIPALMA³

¹ United States Department of Agriculture, SEL & ECMU, ARS, BARC-West, 10300 Baltimore Ave., Beltsville, Maryland 20705, USA

² Florida State Collection of Arthropods, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, Florida, USA; corresponding author: samuel.bolton77@gmail.com

³ Department of Agriculture Food Natural Science and Engineering (DAFNE), University of Foggia, Via Napoli 25, 71122 Foggia, Italy

This issue commemorates the anniversary of Dr. Gary R. Bauchan's passing, on 12 January 2021. Dr. Bauchan, who was one of the victims of the Covid-19 pandemic, will be remembered for the many stunning images that he produced of mites. Mites have suffered from a lack of appreciation, perhaps partly because their small size makes it difficult to see them in detail. His arduous work at the Beltsville Agriculture Research Center has helped to transform the popular representation of mites from obscure creatures to interesting and dynamic organisms that are engaged in complex interactions with their environment. He mainly achieved this by helping to pioneer the use of cryo-scanning electron microscopy on mites (Fig. 1). This is a technique that allows living mites to be frozen in place in order to study their morphology and behavior.

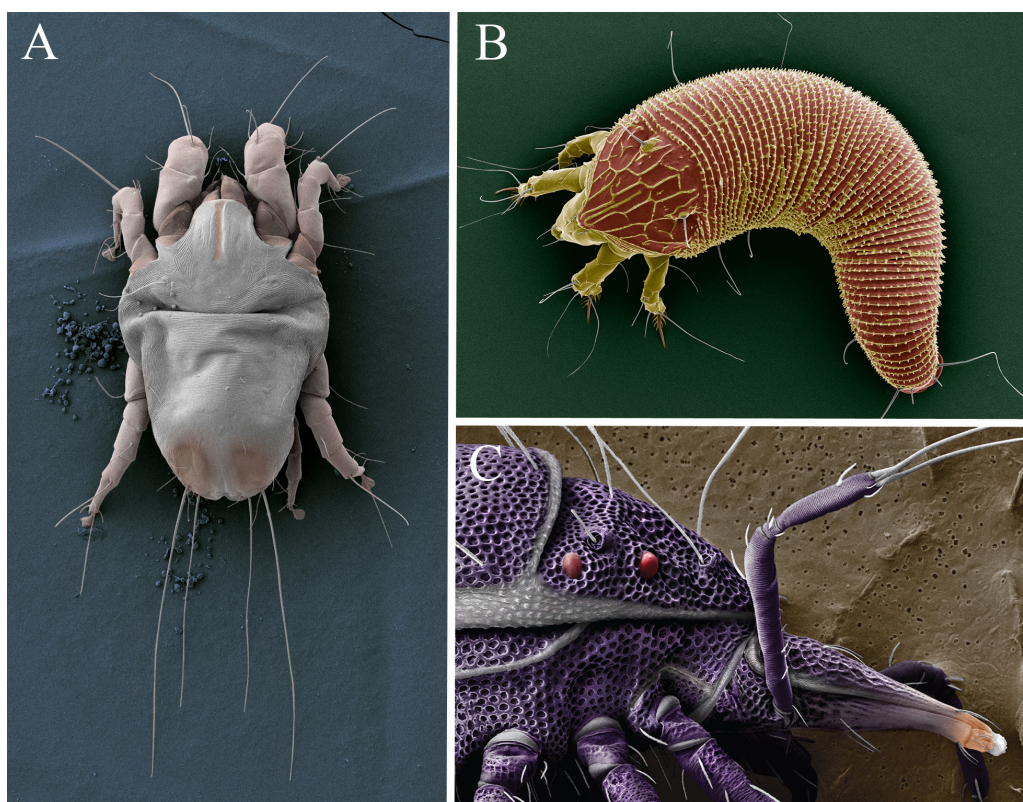


FIGURE 1. SEM images of mites that were taken by Gary Bauchan. A. *Dermaphagoides farinae* Bogdanov. B. *Phyllocoptes fructiphilus* Keifer. C. *Trachymolgus purpureus* Fisher & Dowling.

For those who experienced his sense of humor and boundless love for microscopy, Gary's departure has left an unfathomable void. Being in his presence was like riding in a magical roller coaster through clouds of liquid nitrogen mist into a wondrous microcosm. In Dr. Bauchan's Microscopy Unit, every day was an adventure to discover the unknown. He was a dedicated scientist of the Agricultural Research Service (ARS), who worked at Beltsville for 38 years. During that time, he authored and co-authored 253 publications, including 182 peer-reviewed papers in addition to 71 symposium articles, popular press articles, training videos, book chapters and conference abstracts.

Dr. Bauchan, Gary to all he worked with, was born in the scenic natural beauty of East Grand Rapids and raised in Wyoming, Michigan. He received his B.S. Biological Sciences degree in 1976 at Aquinas College, Michigan. In 1978, he obtained his M.S. Plant Sciences from St. Cloud State University, Minnesota and in 1996, his Ph.D. in Plant Cytogenetics and Breeding from his beloved Michigan State University, Michigan.

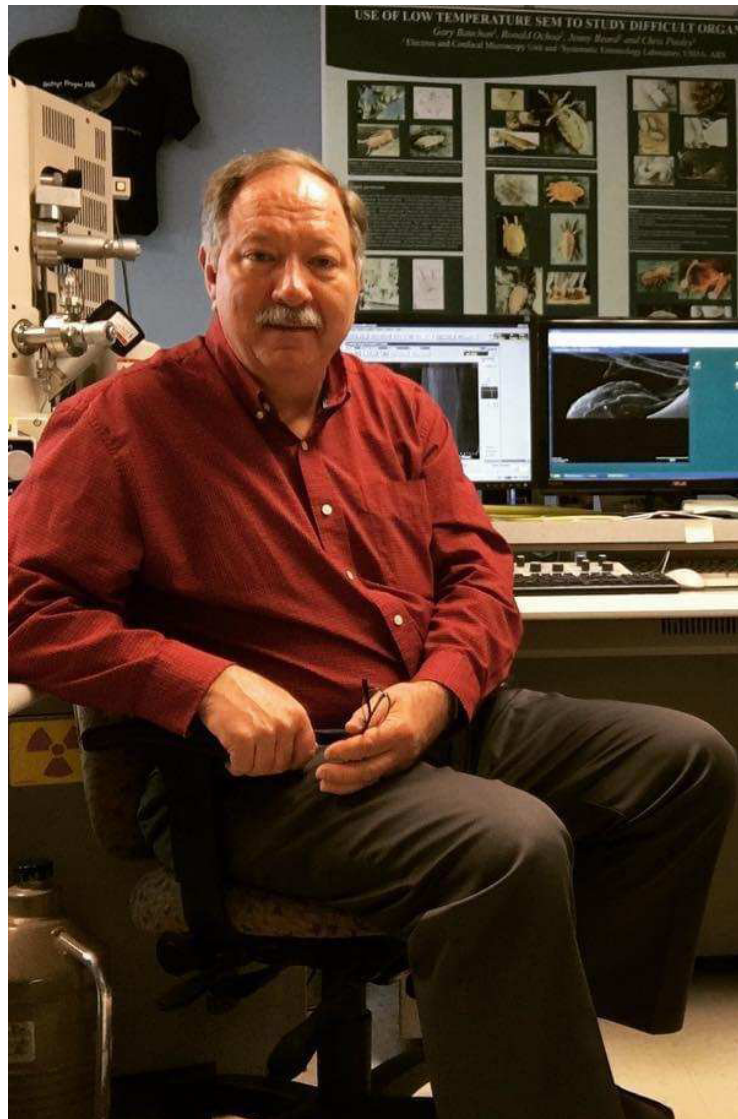
Gary was recognized as a worldwide expert in alfalfa genetics during his first 25 years at ARS. He was elected the President of the North American Alfalfa Improvement Conference in 1992 and served on the conference executive committee from 1988 until 2008. Dr. Bauchan received an Honorary Membership from the North American Alfalfa Conference in 2010 for "Outstanding contributions to the advancement of alfalfa improvement." His research in plant genetics led him into the world of microscopy, and eventually low temperature scanning electron microscopy, to the study of microorganisms.

In 2007, he became the Director of the Electron & Confocal Microscopy Unit (ECMU) in the Soybean Genomics and Improvement Laboratory. In 2012, Dr. Bauchan coordinated the move of the ECMU into a newly renovated, \$1.5 million space containing more than \$3.5 million of scientific equipment, including state-of-the-art electron transmission and scanning electron microscopes, a confocal laser scanning microscope, wide field fluorescence microscope, and a high-resolution digital video light microscope. Under Dr. Bauchan's leadership, research in the ECMU resulted in 146 scientific articles plus 60 other publications in the past 12 years. During this period, his contributions were key in advancing research impacting a wide range of mites.

Dr. Bauchan and his team worked hand in hand with many different acarologists from around the world, obtained many high quality digital images of mites, which are freely accessible worldwide as identification and educational aids. Through LT-SEM and confocal microscopy, Dr. Bauchan provided new information that has added significantly to the understanding of morphology, behavior, biology, ecology, and the integration of molecular studies with CRYO-SEM morphological data. The websites <http://idtools.org/id/mites/flatmites/> and <http://idtools.org/id/mites/beemites/> contain many scanning electron micrographs of flat mites and bee mites that are economically important from all around the world. Since it was launched in March 2012, the flat mite web page has had more than 130,000 visitors from 180 different countries and has proved to be an invaluable tool for researchers and regulatory officials from USDA-APHIS who want to identify mites.

Over the past 12 years, Dr. Bauchan participated in more than 200 different research projects at the Beltsville Agricultural Research Center (BARC), interacting with nearly every research unit on campus. He worked with scientists at USDA-APHIS, the National Park Service, Detroit Michigan's Belle Isle Aquarium, the American Museum in New York, the Field Museum in Chicago, States of California, Florida, Maryland, and Oregon Departments of Agriculture, Maryland's Department of Natural Resources, the National Academy of Sciences, the U.S. Geological Survey, and the Smithsonian Institute. He collaborated with scientists at 18 different U.S. universities and from 40 countries. He mentored 20 visiting scientists, 30 post-doctoral scientists, 16 graduate students and 3 undergraduate students. Gary loved teaching, and with his wife Francine, welcomed many of those he collaborated with and mentored into his home throughout the years for dinners and holidays.

Gary had an enormous amount of energy and was driven by insatiable curiosity. His photographs of microscopic organisms were stunning, showing us worlds that seemed too fantastic to be real. He revealed marvels that were previously unknown. His days started with a warm call to many of us telling the Cryo-SEM was running. There was no work he turned down, and there was no collaborator he ever turned away. He had a true passion for science, and he loved to talk about it over a strong cup of good coffee. We will always remember him.



Acknowledgements

Special thanks to the Baughan Family for providing personal history. Reviews and comments were kindly supplied by the following: Dr. Howard Q. Zhang, BARC Center Director, USDA, ARS; Andrew Ulsamer, USDA, ARS, SEL; Dr. John Hammond, USDA, Arboretum, and Dr. Jenny J. Beard, Queensland Museum, Australia. Mention of trade names or commercial products in this

publication is solely for the purpose of providing specific information and does not imply recommendation or endorsement by the USDA; USDA is an equal opportunity provider and employer.

Publications

- Bauchan, G.R. (1978) *A cytogenetic study of the spider plant, Chlorophytum comosum (Liliaceae)*. M.A. Thesis, St. Cloud State University, 21 pp.
- Bauchan, G.R. (1982) *Cytogenetic studies of the dry beans, species of the genera Phaseolus and Vigna (Leguminosae)*. Dissertation Thesis. Michigan State University, 52 pp.
- Terry-Lewandowski, V., Bauchan, G.R. & Stimart, D.P. (1984) Cytology and breeding behavior of interspecific hybrids and induced amphiploids of *Zinnia elegans* and *Z. angustifolia*. *Canadian Journal of Genetics and Cytology*, 26, 40–45.
<https://doi.org/10.1139/g84-007>
- Bauchan, G.R. & Elgin, J.H. Jr. (1984) A new chromosome number for the genus *Medicago*. *Crop Science*, 24, 193–195.
<https://doi.org/10.2135/cropsci1984.0011183X002400010046x>
- Small, E. & Bauchan, G.R. (1984) Chromosome numbers of *Medicago sativa* complex in Turkey. *Canadian Journal of Botany*, 62, 749–752.
<https://doi.org/10.1139/b84-110>
- Bauchan, G.R. (1985) Alfalfa: A model plant for biotechnology. *Proceedings from the Sixth Eastern Forage Improvement Conference*. Ithaca, NY., pp. 14–19.
- Hammerschlag, F.A., Bauchan, G.R. & Scorza, R. (1985) Regeneration of peach plants from callus derived from immature embryos. *Theoretical and Applied Genetics*, 70, 248–255.
<https://doi.org/10.1007/BF00304907>
- Bauchan, G.R., Linkous, L.-C.W. & Tai, W. (1987) Cytomixis in *Agropyron cristatum*. *Genome*, 28, 900–905.
<https://doi.org/10.1139/g87-129>
- Bauchan, G.R. (1987) Embryo culture of *Medicago scutellata* and *M. sativa*. *Plant Cell, Tissue, and Organ Culture*, 10, 21–29.
<https://doi.org/10.1007/BF00037493>
- Boyle, T.H., Stimart, D.P. & Bauchan, G.R. (1987) Influence of *Zinnia angustifolia* HBK genotype on embryonic and vegetative development of *Z. angustifolia* X *Z. elegans* Jacq. interspecific hybrids. *Theoretical and Applied Genetics*, 73, 716–723.
<https://doi.org/10.1007/BF00260782>
- Hammerschlag, F.A., Bauchan, G.R. & Scorza, R. (1987) Factors influencing in vitro multiplication and rooting of peach cultivars. *Plant Cell and Organ Culture*, 8, 235–242.
<https://doi.org/10.1007/BF00040950>
- Bauchan, G.R. (1988) North American Alfalfa Improvement Conference. *Diversity*, 16, 27–28.
- Quiros, C.F. & Bauchan, G.R. (1988) The genus *Medicago* and the origin of the *Medicago sativa* complex. In: Hanson, A.A., Barnes, D.K. & Hill, R.R. (eds.) *Alfalfa and Alfalfa Improvement*. American Society of Agronomy, Agronomy Monograph, Madison, WI. 29., pp. 93–124.
<https://doi.org/10.2134/agronmonogr29.c3>
- Bauchan, G.R. (1990) USDA/ARS alfalfa research at the Beltsville Agricultural Research Center. *WL Research Haymaker*, pp. 5–6.
- Campbell, T.A. & Bauchan, G.R. (1990) Stability of self-incompatibility and cross-compatibility in partially self-incompatible alfalfa clones. *Canadian Journal of Plant Science*, 70, 739–746.
<https://doi.org/10.4141/cjps90-091>
- Schaff, D.A., Koehler, S.M., Matthews, B.F. & Bauchan, G.R. (1990) *In-situ* hybridization of β -tubulin to alfalfa chromosomes. *Journal of Heredity*, 81, 480–483.
<https://doi.org/10.1093/oxfordjournals.jhered.a111029>
- Bauchan, G.R., Campbell, T.A., O'Neill, N.R. & Elgin, J.H. Jr. (1991) Self-incompatibility in two alfalfa populations. *Crop Science*, 30, 1205–1210.
<https://doi.org/10.2135/cropsci1990.0011183X003000060009x>

- Bauchan, G.R., Diwan, N. & McIntosh, M.S. (1993) Development and evaluation of a core germplasm collection of annual *Medicago* species. *Proceedings of the XVII International Grassland Congress*. Palmerston, New Zealand, pp. 265–266.
<https://doi.org/10.2135/cropsci1990.0011183X003000060009x>
- Naess, S.K., Swartz, H.J. & Bauchan, G.R. (1993) Chromosome loss following interspecific hybridization in *Rubus chamaemorus* L. *Acta Horticulture*, 352, 421–428.
<https://doi.org/10.17660/ActaHortic.1993.352.61>
- Small, E., Bauchan, G.R., Salter, R., Brooks, B. & Auricht, G.C. (1993) A systematic comparison of morphological and seed proteins of early- and late-flowering forms of *Medicago scutellata*. *Canadian Journal of Botany*, 71, 183–192.
<https://doi.org/10.1139/b93-021>
- Bauchan, G.R., Diwan, N. & McIntosh, M.S. (1994) What are annual Medics? *Proceedings of the North American Alfalfa Improvement Conference*. Guelph, Ontario, Canada, p. 6.
- Bauchan, G.R. (1994) Biotechnology: Facts and Promises. *Twenty-Fourth National Alfalfa Symposium*, pp. 191–194.
- Bauchan, G.R. & Campbell, T.A. (1994) Use of an image analysis system to karyotype diploid alfalfa, *Medicago sativa* L. *Journal of Heredity*, 85, 18–22.
- Diwan, N., Bauchan, G.R. & McIntosh, M.S. (1994) A core collection for the United States annual *Medicago* germplasm collection. *Crop Science*, 34, 279–285.
<https://doi.org/10.2135/cropsci1994.0011183X003400010051x>
- Diwan, N., McIntosh, M.S. & Bauchan, G.R. (1994) Methods of developing a core collection of annual *Medicago* species. *Theoretical and Applied Genetics*, 90, 755–761.
<https://doi.org/10.1007/BF00222008>
- Bauchan, G.R. & Hossain, M.A. (1996) Karyotypic analysis of C-banded chromosomes of diploid alfalfa: *Medicago sativa* ssp. *caerulea* and ssp. *falcata* and their hybrid. *Journal of Heredity*, 88, 533–537.
<https://doi.org/10.1093/oxfordjournals.jhered.a023152>
- Diwan, N., Cregan, P., Bauchan, G.R. & Bhagwat, A. (1997) Simple sequence repeat (SSR) DNA markers in alfalfa and perennial and annual *Medicago* species. *Genome*, 40, 887–895.
<https://doi.org/10.1139/g97-115>
- Bauchan, G.R. & Hossain, M.A. (1997) Identification of alfalfa chromosomes using Giemsa banding and image analysis techniques. *Proceedings of the International Grasslands Congress*. Winnipeg, Manitoba, Canada. June, pp. 61–62.
<https://doi.org/10.1093/jhered/89.2.191>
- Bauchan, G.R. & Hossain, M.A. (1997) Karyotypic analysis of C-banded Chromosomes of diploid alfalfa: *Medicago sativa* ssp. *caerulea* and ssp. *falcata* and their hybrid. *Journal of Heredity*, 88, 533–537.
<https://doi.org/10.1093/oxfordjournals.jhered.a023152>
- Turano, F., Dasher, R., Upadhyaya, A., Caldwell, C. & Bauchan, G.R. (1998) Characterization of glutamate dehydrogenase isoenzyme system in germinating soybean. *Plant Science*, 135, 137–148.
[https://doi.org/10.1016/S0168-9452\(98\)00082-X](https://doi.org/10.1016/S0168-9452(98)00082-X)
- Bauchan, G.R. & Hossain, M.A. (1999) Advances in alfalfa cytogenetics. *In: One-hundred years of alfalfa genetics. The Alfalfa Genome*. <http://www.naaic.org/TAG/TAGpapers/Bauchan/advcytog.htm>
- Bauchan, G.R. (1999) Use of annual medics in sustainable agriculture systems. *Proceedings of the EUCARPIA. Forage Researchers European Crop Society*, Perugia, Italy, pp. 146–153.
- Bauchan, G.R. & Hossain, M.A. (1999) Constitutive heterochromatic DNA polymorphisms in diploid *Medicago sativa* ssp. *falcata*. *Genome*, 40, 428–429.
<https://doi.org/10.1139/g99-038>
- Hossain, M.A. & Bauchan, G.R. (1999) Brief communication. Identification of B chromosomes using Giemsa banding in *Medicago*. *Journal of Heredity*, 90, 428–429.
<https://doi.org/10.1093/jhered/90.3.428>
- Kuykendall, L.D., Hashem, F.M., Bauchan, G.R., Devine, T.E. & Dadson, R.B. (1999) Symbiotic competence of *Sinorhizobium fredii* on twenty alfalfa cultivars of diverse dormancy. *Symbiosis*, 27, 1–16.
- O'Neill, N.R. & Bauchan, G.R. (1999) Sources of resistance to Anthracnose in the annual *Medicago* core collection. *Plant Disease*, 84, 261–267.
<https://doi.org/10.1094/PDIS.2000.84.3.261>
- Skinner, D.Z., Bauchan, G.R., Auricht, G. & Hughes, S. (1999) Developing Core Collections for a large annual *Medicago* Collection. *In: Johnson, R.C. & Hodgkin, T. (eds.). Core Collections of Today and Tomorrow*.

- Rome, Italy, pp. 61–67.
- Skinner, D.Z., Bauchan, G.R., Auricht, G. & Hughes, S. (1999) A method for the efficient management and utilization of large germplasm collections. *Crop Science*, 39, 1237–1242.
<https://doi.org/10.2135/cropsci1999.0011183X003900040046x>
- Bauchan, G.R. (2001) Annual Medics: What are they and how do they fit into forage and farming systems. *Proceedings of the American Society of Agronomy*. Charlotte, NC p. 428.
- Bauchan, G.R. & Hossain, M.A. (2001) Distribution and characterization of heterochromatic DNA in the tetraploid ‘African’ alfalfa genome. *Crop Science*, 41, 1921–1926.
<https://doi.org/10.2135/cropsci2001.1921>
- Bauchan, G.R. & Hossain, M.A. (2001) A computerized image analysis system to characterize small plant chromosomes. *Microscopy & Analysis*, 48, 5–7.
- Bauchan, G.R. & Greene, S.L. (2002) Status of the *Medicago* germplasm collection in the United States. International Plant Genetic Resources Institute. *Plant Genetic Resources Newsletter*, 129, 1–10.
- Bauchan, G.R., Campbell, T.A. & Hossain, M.A. (2002) Chromosomal polymorphism as detected by C-banding patterns in ‘Chilean’ alfalfa germplasm. *Crop Science*, 42, 1291–1297.
<https://doi.org/10.2135/cropsci2002.1291>
- Campbell, T.A. & Bauchan, G.R. (2002) Organelle based molecular analysis of the genetic relatedness of cultivated alfalfa (*Medicago sativa*) to *M. edgeworthii* and *M. ruthenica*. *Euphytica*, 125, 51–58.
<https://doi.org/10.1023/A:1015796326675>
- Bauchan, G.R. Campbell, T.A. & Hossain, M.A. (2003) Comparative chromosome banding studies of non dormant alfalfa germplasm. *Crop Science*, 43, 2037–2042.
<https://doi.org/10.2135/cropsci2003.2037>
- O’Neill, N.R., Bauchan, G.R. & Samac, D.A. (2003) Reactions in the annual *Medicago* spp. Core germplasm collection to *Phoma medicaginis*. *Plant Disease*, 87, 557–562.
<https://doi.org/10.1094/PDIS.2003.87.5.557>
- Vandermark, G.J., Ariss, J.J., Bauchan, G.R., Larsen, R.C. & Hughes, T.J. (2006) Estimated genetic relationships among historical sources of alfalfa germplasm and selected cultivars with sequence related amplified polymorphism. *Euphytica*, 152, 9–16.
<https://doi.org/10.1007/s10681-006-9167-7>
- Robins, J.G., Luth, D., Campbell, T.A., Bauchan, G.R., He, C., Viands, D.R., Hansen, J.L. & Brummer, E.C. (2007) Genetic mapping of biomass production in tetraploid alfalfa. *Crop Science*, 47, 1–10.
<https://doi.org/10.2135/cropsci2005.11.0401>
- Robins, J.G., Bauchan, G.R. & Brummer, E.C. (2007) Genetic mapping forage yield, plant height, and regrowth at multiple harvests in tetraploid alfalfa (*Medicago sativa* L.). *Crop Science*, 47, 11–18.
<https://doi.org/10.2135/cropsci2006.07.0447>
- Bauchan, G.R. (2009) Alfalfa (*Medicago sativa* ssp. *sativa* (L.) L. & L.). In: Singh, R.J. (ed.) *Genetic Resources, Chromosome Engineering, and Crop Improvement: Forage Crops*. Vol. 5, Chapter 2. pp. 11–39.
<https://doi.org/10.1201/9781420047400.ch2>
- He, C., Xia, Z.L., Campbell, T.A. & Bauchan, G.R. (2009) Development and characterization of SSR markers and their use to assess genetic relationships among alfalfa germplasm. *Crop Science*, 49, 2176–2186.
<https://doi.org/10.2135/cropsci2007.04.0456>
- Carta, L.K., Bauchan, G.R., Hsu, C-Y & Yuceer, C.Y. (2010) Description of *Parasitorhabditis mississippii*, n. sp. (Nemata: Rhabditida) from *Dendroctonus frontalis* Zimmermann (Coleoptera: Scolytidae). *Journal of Nematology*, 42, 46–54.
- Dowling, A.P.G., Bauchan, G.R., Beard, J.J. & Ochoa, R. (2010) SEM vouchers and genomic data from an individual specimen: maximizing the utility of delicate and rare specimens. *Acarologia*, 50, 479–485.
<https://doi.org/10.1051/acarologia/20101983>
- Gamliel-Atinsky, E., Freeman, S., Maymon, M., Belausov, E., Ochoa, R., Bauchan, G.R. Skoracka, A., Pena, J. & Palevsky, E. (2010) The role of eriophyoids in fungal pathogen epidemiology, mere association or true interaction? *Experimental & Applied Acarology*, 51, 191–204.
https://doi.org/10.1007/978-90-481-9562-6_10
- Jang, S.I., Lillehoj, H.S., Lee, S.H., Lee, K.W., Park, M.S., Bauchan, G.R., Lillehoj, E.P., Bertrand, F., Dupuis, L. & Deville, S. (2010) Immunoenhancing effects of Montanide ISA oil-based adjuvants on recombinant coccidian antigen vaccination against *Eimeria acervulina* infection. *Veterinary Parasitology*, 172, 221–228.

- <https://doi.org/10.1016/j.vetpar.2010.04.042>
- Li, G., Lillehoj, H.S., Lee, K.Y., Lee, S.H., Park, M.S., Jang, S.I., Park, G.M., Bauchan, G.R., Gay, C.G., Ritter, D., Bautista, D. & Siragusa, G.R. (2010) Immunopathology and cytokine responses in commercial broiler chickens with *Gangrenous dermatitis*. *Avian Pathology*, 39, 255–264.
<https://doi.org/10.1080/03079457.2010.495382>
- Lim, H.-S., Varia, A.M., Bae, H., Bragg, J.N., Ruzin, S. E., Bauchan, G. R., Dienelt, M.M., Owens, R.A. & Hammond, J. (2010) Mutation of a chloroplast-targeting signal in *Alternanthera* mosaic virus TGB3 impairs cell-to-cell movement and eliminates long-distance virus movement. *Journal of General Virology*, 91, 2102–2115.
<https://doi.org/10.1099/vir.0.019448-0>
- Macarasin, D., Bauchan, G.R. & Fayer, R. (2010) *Spinacia oleracea* L. Leaf stomata harboring *Cryptosporidium parvum* oocysts: a potential threat for food safety. *Applied and Environmental Microbiology*, 76, 555–559.
<https://doi.org/10.1128/AEM.02118-09>
- Macarasin, D., Santin, M., Bauchan, G.R. & Fayer, R. (2010) Infectivity of *Cryptosporidium arum* oocysts after storage of experimentally contaminated apples. *Journal of Food Protection*, 73, 1824–1829.
<https://doi.org/10.4315/0362-028X-73.10.1824>
- Macarasin, D., Wisniewski, M., Bauchan, G.R. & Samir, D. (2010) The biology of postharvest yeast biocontrol agents. I. Superoxide anion and hydrogen peroxide in the antagonist yeast-fruit interaction: a new role for reactive oxygen species in postharvest biocontrol. *Applied & Environmental Microbiology*, 58, 194–202.
<https://doi.org/10.1016/j.postharvbio.2010.07.008>
- Fisher, J.R., Skvarla, M.J., Bauchan, G.R., Ochoa, R. & Dowling, A.P.G. (2011) *Trachymolgus purpureus* sp. n., an armored snout mite (Acari: Bdellidae) from the Ozark highlands: morphology, development, and key to *Trachymolgus* Berlese. *ZooKeys*, 125, 1–34.
<https://doi.org/10.3897/zookeys.125.1875>
- Menon, P., Ochoa, R., Bauchan, G.R., Joshi, S. & Ramamurthy, V. (2011) A new genus and species *Mangalaus bkapus* (Acari: Eriophyidae) from India. *International Journal of Acarology*, 37, 131–142.
<https://doi.org/10.1080/01647954.2010.497165>
- Ochoa, R., Beard, J.J., Bauchan, G.R., Kane, E.C., Dowling, A.P.G. & Erbe, E.F. (2011) Herbivore exploits chink in armor of host. *American Entomologist*, 57, 26–29.
<https://doi.org/10.1093/ae/57.1.26>
- Wen, Y., Wang, W., Feng, J., Luo, M.-C., Tsuda, K., Katagiri, F. Bauchan, G. & Xiao, S. (2011) Identification and utilization of a sow thistle powdery mildew as a poorly adapted pathogen to dissect post-invasion non-host resistance mechanisms in *Arabidopsis*. *Journal of Experimental Botany*, 62, 2117–2129.
<https://doi.org/10.1093/jxb/erq406>
- Beard, J.J., Ochoa, R., Bauchan, G.R., Trice, M., Redford, A., Walters, T. & Mitter, C. (2012) Flat mites of the world. Part1: *Raoiella* and *Brevipalpus*. Identification Technology Program. www.idtools.org/id.mites/flatmites/
- Beard, J.J., Ochoa, R. Bauchan, G.R., Welbourn, W.C., Pooley, C. & Dowling, A.P.G. (2012) External mouth-part morphology in the Tenuipalpidae (Tetranychioidea): *Raoiella* a case study. *Experimental & Applied Acarology*, 57, 227–255.
<https://doi.org/10.1007/s10493-012-9540-2>
- Konvipasruang, P., Chandrapatya, A., Amrine, J.W., Ochoa, R., Bauchan, G.R. & Pratt, P. (2012) A new species, *Aceria neopaederiae* (Acari: Eriophyidae), infesting *Paederia foetida* L. (Rubiaceae) in Thailand, Hong Kong and Singapore. *Systematic & Applied Acarology*, 17(2), 191–201.
<https://doi.org/10.11158/saa.17.2.5>
- Lakshman, D.K., Pandey, R., Kamo, K., Bauchan, G.R. & Mitra, A. (2012) Genetic transformation of *Fusarium oxysporum* f.sp. *gladioli* with *Agrobacterium* to study pathogenesis in *Gladiolus*. *European Journal of Plant Pathology*, 133, 729–738.
<https://doi.org/10.1007/s10658-012-9953-0>
- Lee, A.K., Hong, J., Bauchan, G.R., Park, S.H. & Joung, Y.H. (2012) Confirmation of hybrid origin of *Cyrtanthus* based on the sequence analysis of internal transcribed spacer. *Scientia Horticulturae*, 144, 153–160.
<https://doi.org/10.1016/j.scienta.2012.07.010>
- Macarasin, D., Patel, J., Bauchan, G.R., Giron, J.A. & Sharma, V.K. (2012) Role of curli and cellulose expression in adherence of *Escherichia coli* O157:H7 to spinach leaves. *Foodborne Pathogens & Disease*, 9,

160–167.

<https://doi.org/10.1089/fpd.2011.1020>

- Macarasin, D., O'Brien, C., Fayer, R., Bauchan, G.R. & Jenkins, M. (2012) Immunolocalization of beta and gama-giardin within the ventral disk in trophozoites of *Giardia duodenalis* using multiplex laser scanning confocal microscopy. *Parasitology Research*, 111, 241–248.
<https://doi.org/10.1007/s00436-012-2825-x>
- Nickle, D.A. & Bauchan, G.R. (2012) Low-temperature scanning electron microscopy to evaluate morphology and predation of *Scolothrips sexmaculatus* Pergande (Thysanoptera: Thripidae) against spider mites (Acari: Tetranychidae: *Tetranychus* spp.) *American Entomologist*, 58, 40–48.
<https://doi.org/10.1093/ae/58.1.0040>
- Oten, K.L.F., Bauchan, G.R., Frampton, J. & Hain, F.P. (2012) Biophysical characteristics of the stem and petiole surface of six hemlock (*Tsuga*) species and a hybrid: implications for resistance to *Adelges tsugae*. *Botany*, 90, 1170–1178.
<https://doi.org/10.1139/b2012-095>
- Roh, M.S. Bauchan, G.R. & Huda, M.S. (2012) The effect of biobased plastic resins containing chicken feather fibers on the growth and flowering of *Begonia boliviensis*. *Horticulture Environment & Biotechnology*, 53, 81–91.
<https://doi.org/10.1007/s13580-012-0118-z>
- Roh, M.S. Bauchan, G.R. & Huda, M.S. (2012) Physical and chemical properties of biobased plastic resins containing chicken feather fibers. *Horticulture Environment & Biotechnology*, 53, 72–80.
<https://doi.org/10.1007/s13580-012-0117-0>
- Roh, M.S., Bauchan, G.R., Murphy, C. & Bunce, J.A. (2012) The property and effect of bioplastic pots on the growth and developmental physiology of lily and begonia. *Horticulture Environment & Biotechnology*, 53, 467–476.
<https://doi.org/10.1007/s13580-012-1311-9>
- Shen, C., Luo, Y., Nou, X., Bauchan, G.R., Zhou, B., Wang, Q. & Millner, P. (2012) Enhanced inactivation of *Salmonella* and *Pseudomonas* biofilms on stainless steel by use of T-128, a fresh-produce washing aid, in chlorinated wash solutions. *Applied & Environmental Microbiology*, 78, 19, 6789–6798.
<https://doi.org/10.1128/AEM.01094-12>
- Vaira, A.M., Lim, H.-S., Bauchan, G.R., Owens, R.A., Natilla, A., Dienelt, M.M., Reinsel, M.D. & Hammond, J. (2012) *Lolium* latent virus (Alphaflexiviridae) coat proteins: expression and functions in infected plant tissue. *Journal of General Virology*, 93, 1814–1824.
<https://doi.org/10.1099/vir.0.042960-0>
- Yossa, N., Patel, J., Macarasin, D., Millner, P., Murphy, C., Bauchan, G.R. & Martin Lo, Y. (2012) Antibacterial activity of cinnamaldehyde and sporran against *Escherichia coli* 0157:H7 and *Salmonella*. *Journal of Food Processing Preservation*, 38, 749–757 (2014).
<https://doi.org/10.1111/jfpp.12026>
- Barnaby, J.Y., Kim, M., Bauchan, G.R., Bunce, J., Reddy, V. & Sicher, R.C. (2013) Drought responses of foliar metabolites in three maize hybrids differing in water stress tolerance. *PLOS ONE*, 8, 10, <https://doi.org/10.1371/journal.pone.0077145>.
- Beard, J.J., Ochoa, R., Childers, C.C., Bauchan, G.R. & Shepard, M. (2013) Traveling with tea: A *Tuckeralla*'s tale. *Experimental & Applied Acarology*, 59, 177–202.
<https://doi.org/10.1007/s10493-012-9627-9>
- Broadhurst, C.L., Bauchan, G.R., Murphy, C.A. Tang, Y.-T., Pooley, C. Davis, A.P. & Chaney, R.L. (2013) Accumulation of zinc and cadmium and localization of zinc in *Picris divaricata*. *Environmental & Experimental Botany*, 87, 1–9.
<https://doi.org/10.1016/j.envexpbot.2012.08.010>
- Fayer, R., Santin, M., Macarasin, D. & Bauchan, G.R. (2013) Adhesive-tape recovery combined with molecular and microscopic testing for the detection of *Cryptosporidium* oocysts on experimentally contaminated fresh produce and a food preparation surface. *Parasitology Research*, 112, 1567–1574.
<https://doi.org/10.1007/s00436-013-3305-7>
- Jang, C., Seo, E.-Y., Nam, J., Bae, J., Gim, Y.G., Kim, H.G., Cho, I.S., Lee, Z.-W., Bauchan, G.R., Hammond, J. & Lim, H.-S. (2013) Insights into *Alternanthera* mosaic virus TGB3 functions: interactions with *Nicotiana benthamiana* PSbO correlate with chloroplast vesiculation and veinal necrosis caused by TGB3 over-expression. *Frontiers in Plant Science*, 4(5), 1–15.
<https://doi.org/10.3389/fpls.2013.00005>

- Macarisin, D., Patel, J., Bauchan, G.R., Giron, J.A. & Ravishankar, S. (2013) Effect of spinach cultivar and bacterial adherence factors on survival of *Escherichia coli* O157:H7 on spinach leaves. *Journal of Food Protection*, 76, 1829–1837.
<https://doi.org/10.4315/0362-028X.JFP-12-556>
- Youssef, R.M., MacDonald, M.H., Brewer, E.P., Bauchan, G.R., Kim, K.-H. & Matthews, B.F. (2013) Ectopic expression of *AtPAD4* broadens resistance of soybean to soybean cyst and root-knot nematodes. *BMC Plant Biology*, 13, 67–78.
<https://doi.org/10.1186/1471-2229-13-67>
- Beard, J.J., Seeman, O.D. & Bauchan, G.R. (2014) Tenuipalpidae (Acari: Trombidiformes) from Casuarinaceae (Fagales). *Zootaxa*, 3778, 1–157.
<http://dx.doi.org/10.11646/zootaxa.3778.1.1>
- Bolton, S.J., Klompen, H., Bauchan, G.R. & Ochoa, R. (2014) A new genus and species for Nematalycidae (Acari: Endeostigmata). *Journal of Natural History*, 48(23–24), 1359–1373.
<https://doi.org/10.1080/00222933.2013.859318>
- Vega, F.E., Simpkins, A., Bauchan, G.R., Infante, F., Kramer, M. & Land, M.F. (2014) On the eyes of male coffee berry borers as rudimentary organs. *PLOS ONE*, 9, e85860.
<https://doi.org/10.1371/journal.pone.0085860>
- Beard, J.J., Ochoa, R., Braswell, W. & Bauchan, G.R. (2015) *Brevipalpus phoenicis* (Geijskes) Species Complex: a Closer Look. *Zootaxa*, 3944(1), 1–67.
<https://doi.org/10.11646/zootaxa.3944.1.1>
- Bolton, S.J., Bauchan, G.R., Ochoa, R., Pooley, C. & Klompen, H. (2015) The role of the integument with respect to different modes of locomotion in the Nematalycidae (Endeostigmata). *Experimental & Applied Acarology*, 65, 149–161.
<https://doi.org/10.1007/s10493-014-9857-0>
- Bolton S.J., Bauchan, G.R., Ochoa, R. & Klompen, H. (2015) A novel fluid-feeding mechanism for microbivory in the Acariformes (Arachnida: Acari). *Arthropod Structure and Development*, 44(4), 313–325.
<https://doi.org/10.1016/j.asd.2015.04.009>
- Castro, E.B., Ochoa, R., Feres, R.J.F., Beard, J.J. & Bauchan, G.R. (2015) Reinstatement of the genus *Colopalpus* Pritchard & Baker (1958) and re-description of *Colopalpus matthyssei* P. & B. (1958), the type species of the genus (Acari, Tenuipalpidae). *International Journal of Acarology*, 41(4), 310–328.
<https://doi.org/10.1080/01647954.2015.1031276>
- Favret, C., Tzaud, M., Erbe, E.F., Bauchan, G.R. & Ochoa, R. (2015) An adhesive colophore may help direct the springtail jump. *Annals of the Entomological Society of America*, 108, 1–6.
<https://doi.org/10.1093/aesa/sav078>
- Fisher, J. R., Fisher, D.M., Nelson, W.A., O'Neill, J.C., Skvarla, M.J., Ochoa, R., Bauchan, G.R., Radwell A.J. & Dowling, A.P.G. (2015) *Torrenticola trimaculata* n. sp. (Parasitengona: Torrenticolidae), a three-spotted water mite from eastern North America: taxonomic history, species delimitation, and survey of external morphology. *Acarologia*, 55(1), 71–116.
<https://doi.org/10.1051/acarologia/20152155>
- Rezende, J.M., Lofego, A.C., Ochoa, R. & Bauchan, G.R. (2015) New species of *Daidalotarsonemus* and *Excelsotarsonemus* (Acari, Tarsonemidae) from the Brazilian rainforest. *ZooKeys*, 475, 1–36.
<https://doi.org/10.3897/zookeys.475.8827>
- Castro, E.B., Kane, E.C., Feres, R.J.F., Ochoa, R. & Bauchan, G.R. (2016) Definition of *Tenuipalpus* sensu stricto (Acari: Tenuipalpidae), with redescription of *Tenuipalpus caudatus* (Duges) and description of a new species from Costa Rica. *International Journal of Acarology*, 42, 106–126.
<https://doi.org/10.1080/01647954.2015.1130941>
- Castro, E.B., Feres, R.J.F., Ochoa, R. & Bauchan, G.R. (2016) A new species of *Tenuipalpus* sensu stricto (Acari: Tenuipalpidae) from Brazil, with ontogeny and a key to the known species. *Zootaxa*, 4088(3), 355–378.
<https://doi.org/10.11646/zootaxa.4088.3.3>
- Camerik, A.M., Magowski, W., Hawkes, P., Ueckermann, E.A., Ochoa, R. & Bauchan, G.R. (2016) A new species of *Zambedania* (Acari: Heterostigmata: Pygmephoridae) from Two Rivers Platinum Mine in South Africa and notes on the life-cycle of the genus. *Zoological Studies*, 55(11), 1–21.
<http://dx.doi.org/10.6620/ZS.2016.55-11>
- Hernandes, F.A., Mironov, S.V., Bauchan, G.R. & Ochoa, R. (2016) A new asymmetrical feather mite of the genus *Michaelia* Trouessart, 1884 (Astigmata: Freyanidae) from the Neotropical Cormorant, *Phalacroco-*

- rax brasiliensis* (Pelecaniformes). *Acarologia*, 56, 45–61.
<https://doi.org/10.1051/acarologia/20162187>
- Hernandes, F.A., Skvarla, M.J., Fisher, J.R., Dowling, A.P.G., Ochoa, R., Ueckermann, E.A. & Bauchan, G.R. (2016) Catalogue of snout mites (Acariformes: Bdellidae) of the world. *Zootaxa*, 4152, 1–83.
<https://doi.org/10.11646/zootaxa.4152.1.1>
- Castro, E.B., Ramos, F.A.M., Feres, R.J.F., Ochoa, R. & Bauchan, G.R. (2017) Redescription of *Tenuipalpus heveae* Baker (Acari: Tenuipalpidae) and description of a new species collected on rubber tree from Amazonia, Brazil. *Acarologia*, 57, 421–458.
<https://doi.org/10.1051/acarologia/20174166>
- Chetverikov, P.E., Amrine, J., Bauchan, G.R., Ochoa, R., Sukhareva, S.I. & Vishnyakov, A.E. (2017) Supplementary description of *Novophytoptus stipae* Keifer 1962 (Acariformes, Eriophyoidea) with LT-SEM observation on mites from putatively conspecific populations: cryptic speciation or polyphagy of novophytoptines on phylogenetically remote hosts? *Systematic & Applied Acarology*, 22(2), 253–270.
<https://doi.org/10.11158/saa.22.2.9>
- Hernandes, F.A., O'Connor, B.M., Bauchan, G.R. & Ochoa, R. (2017) A new species of *Proctophyllodes* Robin, 1868 (Acari: Proctophyllodidae) from two tanagers of the genus *Piranga* Vieillot (Passeriformes: Cardinalidae) from North America. *Journal of Natural History*, 51(41–42), 2407–2416.
<https://doi.org/10.1080/00222933.2017.1381772>
- Hernandes, F.A., Bauchan, G.R. & Ochoa, R. (2017) New and little known feather mites (Acariformes: Astigmata) analysed with low-temperature scanning electron microscopy. *International Journal of Acarology*, 43, 499–517.
<https://doi.org/10.1080/01647954.2017.1367032>
- Metz, M.A., Miller, D.R., Dickey, A.M., Bauchan, G.R., Ochoa, R., Skvarla, M. & Miller, G. (2017) Rediscovering digitules in Aphidomorpha and the question of homology among Sternorrhyncha (Insecta, Hemiptera). *ZooKeys*, 683, 39–50.
<https://doi.org/10.3897/zookeys.683.10100>
- Welbourn, W.C., Beard, J.J., Bauchan, G.R. & Ochoa, R. (2017) Description of two species of *Tenuipalpus* (Acari: Trombidiformes) from succulent plants. *International Journal of Acarology*, 43(2), 112–136.
<https://doi.org/10.1080/01647954.2016.1255253>
- De Araujo, M.S., Bichuette, M.E., Bauchan, G.R., Ochoa, R. & Feres, R.J. (2018) A new species of cave dwelling *Neocarur* (Acari: Opilioacaridae) from Bahia state, Brazil, with remarks on taxonomic characters. *Zootaxa*, 4402(2), 303–322.
<https://doi.org/10.11646/zootaxa.4402.2.4>
- Bassini-Silva, R., de Castro J.F., Maturano, R., Muñoz-Leal, S., Ochoa, R., Bauchan, G.R. Labruna, M.B., Barros-Battesti, D.M. (2018) *Blankaartia sinnamaryi* (Trombidiformes: Trombiculidae) parasitizing birds in southeastern Brazil, with notes on *Rickettsia* detection. *Revista Brasileira de Parasitologia Veterinaria*, 27, 354–362.
<https://doi.org/10.1590/S1984-296120180057>
- Bassini-Silva R., de Castro J.F., Muñoz-Leal, S., Maturano, R., Welbourn C.W., Ochoa, R., Bauchan, G.R. & Barros-Battesti, D.M. (2018) A new species of the genus *Eutrombicula* Ewing, 1938 (Trombidiformes: Trombiculidae) and new records for the species *Eutrombicula batatas* (Linnaeus, 1758) in Brazil. *Acarologia*, 58(4), 976–986.
<https://doi.org/10.24349/acarologia/20184304>
- Beard, J.J., Ochoa, R., Bauchan, G.R., Pooley, C. & Dowling, A.P.G. (2018) *Raoiella* of the world (Trombidiformes: Tetranychoidae: Tenuipalpidae). *Zootaxa*, 4501, 1–302.
<https://doi.org/10.11646/zootaxa.4501.1.1>
- Bolton, S.J., Bauchan, G.R., Chetverikov, P.E., Ochoa, R. & Klompen, H. (2018) A rudimentary sheath for the smallest of ‘biting’ chelicerae: a precursor to the stylet sheath of Eriophyoidea (Acariformes). *International Journal of Acarology*, 44(8), 374–381.
<https://doi.org/10.1080/01647954.2018.1488274>
- Castro, E.B., Beard, J.J., Ochoa, R., Bauchan, G.R. & Feres, R. (2018) Two new species of *Tenuipalpus sensu stricto* (Acari: Tenuipalpidae) from Brazil, with a discussion on the ontogeny of leg setae. *Zootaxa*, 4540(1), 178–210.
<https://doi.org/10.11646/zootaxa.4540.1.12>
- Childers, C.C., de Lillo, E., Bauchan, G.R., Rogers, M.E., Ochoa, R. & Robinson, C. (2018) External morphology of the mouthparts and observations on behavior of *Tuckerella japonica* on *Camellia sinensis* in the

- continental USA. *Experimental & Applied Acarology*, 74, 55–71.
<https://doi.org/10.1007/s10493-017-0204-0>
- Gulbrunson, C., Mowery, J.D., Pooley, C., Ochoa, R., Bolton, S.J. & Bauchan G.R. (2018) Three-Dimensional Printing of Agriculturally Important Mites Generated from Confocal Microscopy. *Microscopy & Microanalysis*, 24, 1360–1361.
<https://doi.org/10.1017/S1431927618007286>
- de Castro J.F., Bassini-Silva, R., Mendoza-Roldan, J.A., Muñoz-Leal, S., Hingst-Zaher, E., Ochoa, R., Bauchan, G.R. & Barros-Battesti, D.M. (2018) A contribution to the knowledge of *Quadrasetta brasiliensis* Goff and Gettinger, 1989 (Trombidiformes: Trombiculidae), with description of the deutonymph instar. *Acarologia*, 58, 442–456.
<https://doi.org/10.24349/acarologia/20184252>
- Klimov, P.B., OConnor, B.M., Chetverikov, P.E., Bolton, S., Pepato, A., Mortazavi, A.L., Tolstikov, A.V., Bauchan, G.R. & Ochoa, R. (2018) Comprehensive phylogeny of acariform mites (Acariformes) provides insights on the origin of the four-legged mites (Eriophyoidea), a long branch. *Molecular Phylogenetics & Evolution*, 119, 105–117.
<https://doi.org/10.1016/j.ympev.2017.10.017>
- Ramsey, R., Gulbrunson, C., Mowery, J., Ochoa, R., VanEngelsdorp, D. & Bauchan, G.R. (2018) A multi-microscopy approach to discover the feeding site and host tissue consumed by *Varroa destructor* on host Honey Bees. *Microscopy & Microanalysis*, 24, 1258–1259.
<https://doi.org/10.1017/S1431927618006773>
- Rezende, J.M., Lofego, A., Gulbrunson, C., Bauchan, G.R. & Ochoa, R. (2018) Review of the genus *Ceratotarsonemus* DeLeon, 1956 (Acari: Prostigmata: Tarsonemidae), with description of a new species from the Amazon forest. *Zootaxa*, 4483(2), 271–294.
<https://doi.org/10.11646/zootaxa.4483.2.3>
- Otero-Colina, G., Ochoa, R., Amrine, J., Hammond, J., Jordan, R. & Bauchan, G.R. (2018) Eriophyoid mites found on healthy and Rose Rosette Diseased roses in the United States. *Journal of Environmental Horticulture*, 36(4), 146–153.
<https://doi.org/10.24266/0738-2898-36.4.146>
- Bassini-Silva R., de Castro J.F., Hernandez F.A., Ochoa, R., Bauchan, G.R., Dowling, A.P.G. & Barros-Battesti D.M. (2019) Dermatitis in humans caused by *Ornithonyssus bursa* (Berlese 1888) (Mesostigmata: Macroonyssidae) and new records from Brazil. *Revista Brasileira de Parasitologia Veterinaria*, 28(1), 134–139.
<https://doi.org/10.1590/S1984-296120180097>
- Ramsey, S., Ochoa, R., Bauchan, G.R., Gulbrunson, C., Mowery, J., Cohen, A., Lim, D., Joklik, J., Cicero, J., Ellis, J., Hawthornem, D. & vanEngelsdorp, D. (2019) *Varroa destructor* (Varroidae) feeds primarily on honeybee fat body tissue not hemolymph. *Proceedings of National Academy of Sciences of the United States of America*, 116(5), 1792–1801.
<https://doi.org/10.1073/pnas.1818371116>
- Ueckermann, E.A., Ochoa, R., Bauchan, G.R. & Neser, S. (2019) An amazing sub-cambium flat mite from South Africa (Acari: Trombidiformes: Tenuipalpidae). *Acarologia*, 59(4), 507–530.
<https://doi.org/10.24349/acarologia/20194351>
- Azevedo, L.H., Moreira, M.F.P., Pereira, G.G., Borges, V., de Moraes, G.J., Inomoto, M.M., Vicente, M., de Siqueira Pinto, M., Peres, L.P., Rueda-Ramírez, D., Carta, L., Meyer, S.L.F., Mowery, J., Bauchan, G.R., Ochoa, R. & Palevsky E. (2020) Combined releases of soil predatory mites and provisioning of free-living nematodes for the biological control of root-knot nematodes on ‘Micro Tom tomato.’ *Biological Control*, 146, 1–10.
<https://doi.org/10.1016/j.biocontrol.2020.104280>
- Carrillo, D., Cruz, L.F., Revynthi, A.M., Duncan, R.E., Bauchan, G.R., Ochoa, R., Paul E. Kendra, P.E. & Bolton, S. (2020) Detection of the Lychee Erinose Mite, *Aceria litchi* (Keifer) (Acari: Eriophyidae) in Florida, USA: a comparison with other alien populations. *Insects*, 11, 235, 1–12.
<https://doi.org/10.3390/insects11040235>
- Liu, M., Yi, T.-C., Gulbrunson, C., Bauchan, G.R. & Ochoa, R. (2020) Ontogenetic and morphological studies on *Tetranychus Canadensis* (Acari: Tetranychidae) *Zootaxa*, 4857(1), 215–250.
<https://doi.org/10.11646/zootaxa.4857.1.11>
- Roy, A., Stone, A.L., Otero-Colina, G., Brlansky, R.H., Ochoa, R., Bauchan, G.R., Schneider, W.L., Nakhla, M.K., & Hartung, J.S. (2020) Reassortment of RNA2 genome creates stable lineages among strains of Orchid fleck virus infecting citrus in Mexico. *Phytopathology*, 110, 106–120.

- <https://doi.org/10.1094/PHYTO-07-19-0253-FI>
- Solo, K., Collins, S.B., Shires, M.K., Ochoa, R., Bauchan, G.R., Schneider, L.G., Henn, A., Jacobi, J.C., Williams-Woodward, J.L., Hajimorad, M.R., Hale, F.A., Wilkerson, J.B., Windham, A.S., Ong, K.L. & Windham, M.T. (2020) A Survey of Rose rosette virus and Eriophyid mites associated with roses in the Southeastern United States. *Horticultural Science*, 55(8), 1–7.
<https://doi.org/10.21273/HORTSCI14653-20>
- Sousa, A.S.G., Rezende, J.M., Lofego, A.C., Ochoa, R., Bauchan, G.R., Gulbranson, C. & Oliveira, A.R. (2020) Two new species of *Tarsonemus* (Acari Tarsonemidae) from Bahia, Brazil. *Systematic & Applied Acarology*, 25(6), 986–1012.
<https://doi.org/10.11158/saa.25.6.4>
- Combata-Heredia O., Gulbranson C.G., Ochoa, R., Quintero-Gutierrez, E.J., Bauchan, G.R. & Klompen H. (2021) Size, shape, and direction matters: matching secondary genital structures in male and female mites using multiple microscopy techniques and 3D modeling. *PLOS ONE*, 16(8), 001–019.
<https://doi.org/10.1371/journal.pone.0254974>
- Di Palma, A., Beard, J.J., Bauchan, G.R., Ochoa, R., Seeman, O. & Kitajima, E.W. (2021) Dorsal setae in *Raoiella* (Acari: Tenuipalpidae): their functional morphology and implication in fluid secretion. *Arthropod Structure & Development*, 60, 1–10.
<https://doi.org/10.1016/j.asd.2020.101023>

Submitted: 10 Jan. 2022; accepted by Zhi-Qiang Zhang: 11 Jan. 2022; published: 12 Jan. 2022