

## An overview of the XV International Congress of Acarology

Sebahat K. OZMAN-SULLIVAN<sup>1,3</sup> , Gregory T. SULLIVAN<sup>2</sup> 

<sup>1</sup> Ondokuz Mayıs University, Faculty of Agriculture, Department of Plant Protection, 55139 Samsun, Turkey

<sup>2</sup> The University of Queensland, School of Earth and Environmental Sciences, 4072 Brisbane, Australia

<sup>3</sup> Corresponding author: sozman@omu.edu.tr

Received: 27 July 2019 Accepted: 30 July 2019 Available online: 31 July 2019

**ABSTRACT:** The XV International Congress of Acarology (XV ICA) was held in Antalya, Turkey between 2 and 8 September, 2018. The theme of the congress was "The Acari: very small but impossible to deny!". The congress addressed all aspects of fundamental, agricultural, medical and veterinary acarology and related topics. There were 271 participants from 44 countries across six continents. In total, there were 279 presentations, namely 188 oral presentations and 91 poster presentations, in 21 sections. The congress had a four day scientific program, one day for the technical and social tours, and a one day post-congress tour.

**Keywords:** Mite, tick, congress, XV ICA 2018, Antalya, Turkey.

### INTRODUCTION

The International Congress of Acarology (ICA) has been conducted six times in Europe, four times in North America, two times in Asia and once in both South America and Australia/Oceania. The first congress (I ICA) was held at Fort Collins, Colorado, USA in 1963 with 146 participants representing 23 countries (Woolley, 1964; Flechtmann, 2011), and XIV ICA was held in Kyoto, Japan in 2014 (Gotoh and Taylor, 2016).

The most recent congress, XV ICA (<http://www.acarology.org/ica/ica2018/>), was held from 2 to 8 September, 2018 in Antalya, Turkey, fifty five years after the first congress in the USA. The XV ICA congress venue was the magnificent Mediterranean beachside resort, Swandor Hotels & Resorts Topkapi Palace, which was built in a similar architectural style to the Ottoman Topkapi Palace in Istanbul. The congress covered all aspects of fundamental, agricultural, medical and veterinary acarology and related topics. The congress theme was, "The Acari: very small but impossible to deny!", and a tulip-shaped mite was designed and adopted as the congress logo because the tulip is a cultural symbol of Turkey. The congress bag was blue to represent the colour of the Mediterranean Sea. The congress abstract book and photos can be found on the congress website; the abstract book also includes a list of participants and their e-mail addresses ([http://www.acarology.org/ica/ica2018/files/ICA\\_2018\\_Abstract\\_Book.pdf](http://www.acarology.org/ica/ica2018/files/ICA_2018_Abstract_Book.pdf)).

### CONGRESS PARTICIPANTS

The XV ICA Organizing Committee was delighted to have 271 participants from 6 continents and 44 countries (Fig. 1). The age of participants, which ranged from students in their 20s to veteran acarologists in their 90s, speaks volumes to the power of ICA to inspire acarologists and bring them together every four years. The participants at XV ICA were from Australia (1), Austria (3), Bangladesh (1),

Belgium (4), Brazil (8), Canada (4), China (20), Colombia (2), Costa Rica (1), Cyprus (1), Czech Republic (2), Finland (2), France (3), Georgia (5), Germany (3), Greece (2), Hungary (1), India (10), Iran (8), Iraq (1), Israel (4), Italy (5), Japan (17), Lithuania (3), Mexico (3), New Zealand (2), Pakistan (2), Philippines (1), Poland (10), Portugal (7), Romania (3), Russia (9), Saudi Arabia (5), Serbia (6), South Africa (5), South Korea (1), Spain (6), Sri Lanka (2), Thailand (3), The Netherlands (8), Tunisia (1), Turkey (69), United Kingdom (2) and United States of America (15).

There were 381 participants from 44 countries at XIII ICA in Brazil, including 173 from Brazil (Moraes and Proctor, 2011), and 310 participants from 44 countries at XIV ICA in Japan (Gotoh and Taylor, 2016), including 112 from Japan (Masahiro Osakabe - XIV ICA Secretary-general; pers. comm., 26.07.2019). That means the last three congresses have all been attended by about 200 participants from non-host countries.

### CONGRESS PROGRAM

The seven days of the congress included a registration day, a four day scientific program, one day for the technical and social tours, and a one day post-congress tour.

#### Registration

Registration for the congress started on Sunday, 2 September, 2018 and continued during the congress.

#### Opening ceremony

On the morning of Monday, 3 September, Sebahat K. Ozman-Sullivan, President of the XV ICA 2018, officially welcomed participants to the congress. Ferit Turanlı, President of the Entomological Society of Turkey, then gave a short history of entomological and acarological research in Turkey. Peter Schausberger, General



**Figure 1.** Group photograph of the participants at the XV International Congress of Acarology, Antalya, Turkey.

Turkey. Peter Schausberger, General Secretary of the Executive Committee of the ICA, then presented a moving tribute to dear colleagues, Maurice W. Sabelis, Philippe Lebrun, Gerd Alberti, James A. McMurtry, Gwylim O. Evans, Jean Louis Camicas, James H. Oliver, Jaroslav Smrz and Donald A. Griffiths, who had passed away since XIV ICA 2014 in Kyoto. Zhi-Qiang Zhang, President of the Systematic and Applied Acarology Society, then announced the winners of the inaugural James Allen McMurtry Award (Zhang, 2018a,b). The two winners of the \$5,000 awards were Gerald W. Krantz of the USA and Evert E. Lindquist of Canada for their outstanding contributions to acarology over a long period (Walter and Halliday, 2018; Beaulieu and Behan-Pelletier, 2018) (Fig. 2).

### Recognition of sponsors

After the opening ceremony and between the presentations of the first two keynote speakers, Maria Navajas and Kosta Y. Mumcuoglu, representatives of the sponsors were invited to the stage to receive their commemorative plaques by Gregory T. Sullivan, the Scientific Secretary and Master of Ceremonies for all congress proceedings. The sponsors, whose contributions were pivotal to the staging of the congress, were Biobest, Koruma Tarim, Leica, Agrobio, Arslanturk Ltd., Dogal Tarim, Koppert, Bayer, Ecaser, Karimex and SG Koleoglu Ltd.

### Overview of presentations

The congress comprehensively addressed all aspects of acarology under 21 different sections. In total, there were 279 presentations, namely 188 oral and 91 poster presentations. The oral presentations commenced on the afternoon of Monday, 3 September.

### Oral presentations

The oral program included six keynote presentations, three invited presentations, five symposium-specific lectures and the presentations at the 4 symposia, in addition to the presentations in the regular sections.

The six keynote speakers were Maria Navajas (France), Kosta Y. Mumcuoglu (Israel), Peter Schausberger (Austria), James W. Amrine (USA), Edward A. Ueckermann (South Africa) and Hans Klompen (USA).

The three invited speakers in the Biodiversity section were Olga L. Makarova (Russia), Frederic Beaulieu (Canada) and Fabio Akashi Hernandez (Brazil). The five symposium-specific lectures were given by Michael L. Levin (USA), Lidia Chitimia-Dobler (Germany), Derya Yapar (Turkey), Ayse Semra Gureser (Turkey) and Ali Kemal Erenler (Turkey).

Four symposia in total were conducted on Monday 3, Tuesday 4 and Thursday 6, September. They were: 'Parasitic and free living mites of medical and veterinary



**Figure 2.** Sebahat K. Ozman-Sullivan, President of the XV International Congress of Acarology (XV ICA) (right), accepted the James A. McMurtry Award on behalf of G. W. Krantz from Zhi-Qiang Zhang, President of the Systematic & Applied Acarology Society and XVI ICA (left), during the opening ceremony at the XV ICA in Antalya, Turkey.

importance', which was organized by Kosta Y. Mumcuoglu; 'Ticks and tick-borne diseases' was organized by Kosta Y. Mumcuoglu and Michael L. Levin; 'Invasive species and biosecurity: Understanding and preventing mite bioinvasions' was organized by Maria Navajas and Denise Navia; and 'Mite-plant interactions: From responses to tolerance/resistance' was organized by Maria Pappas, Raul A. Sperotto and Merijn Kant.

Overall, there were 38 sessions of oral presentations under the 21 sections in three halls over the four days of the scientific program. The 21 sections in alphabetical order were Agricultural acarology, Alternative pesticides, Aquatic acarology, Biodiversity, Biological control, Chemical control and resistance, Dispersal of mites, Ecology and behaviour of mites, Evolution and phylogeny, Integrated pest management, Mite-plant interactions, Mites of medical importance, Mites of veterinary importance, Population dynamics, Soil acarology, Taxonomy and systematics, Tick biology and physiology, Tick epidemiology and systematics, Ticks and tick-borne diseases in Turkey, Ticks and tick-borne diseases worldwide and Understanding and preventing mite bioinvasions.

The medical and veterinary acarology sections deserve special mention. About 35 presenters participated in these sections and collectively they made an outstanding contribution to the congress via their eight sessions, which constituted more than 20% of all sessions. The next busiest sections were Biological control (5), Mite bioinvasions (4), Taxonomy and systematics (3), Agricultural acarology (3) and Mite-plant interactions (3).

### Poster presentations

The 91 posters were presented on Tuesday, 4 September and Thursday, 6 September in the poster hall. The posters, which covered a broad spectrum of acarological pursuits, generated considerable interest and discussion.

### Technical and social tours

The technical and social tours were conducted on Wednesday, 5 September. The morning technical tour commenced at the Antalya 2016 International Expo Center, which was built for an international horticultural exposition. It was followed by an excellent video presentation about the Batı Akdeniz (Western Mediterranean) Agricultural Research Institute by the manager Abdullah Unlu, and then a tour of its glasshouses, propagation facilities and citrus arboretum. The afternoon social tour included the amazingly well preserved Aspendos antique theatre, a Roman aqueduct, and the Temple of Apollo at the ancient city of Side on the beautiful Mediterranean coastline.

### Closing ceremony

The closing ceremony was conducted on the afternoon of Friday, 7 September. The congress president Sebahat K. Ozman-Sullivan gave her closing address and then presented plaques to the six keynote speakers during the General Assembly. The Organising Committee of XV ICA created six awards from congress sponsorships for the best oral and poster presentations by students. The six winners were selected by the Scientific Committee members who attended the congress. The six keynote speakers presented the awards for the best three student oral presentations to Sophie Le Hesran (The Netherlands), Alicja Laska (Poland) and Gongyu Lin (Canada), who each received 500 euros, and for the best three student poster presentations to Svetlana S. Paponova (Russia), Natalia Szudarek-Trepto (Poland) and Yusuke Hasegawa (Japan), who each received 250 euros (Fig. 3).

Peter Schausberger then announced the new membership of the Executive Committee of the ICA. He also proposed that deceased ICA Honorary Members become Eternal Members of the ICA. The proposal was unanimously accepted by the General Assembly. Peter Schausberger also announced that there had been three excellent bids to host XVI ICA 2022, namely Auckland, New Zealand; Montpellier, France; and Dublin, Ireland. He then revealed that after due consideration of the relative merits of the three bids by the Executive Committee of the ICA, the New Zealand bid had been selected.



**Figure 3.** Keynote speakers and student award winners at the XV International Congress of Acarology, Antalya, Turkey.

Zhi-Qiang Zhang, President of the XVI ICA, on behalf of the successful New Zealand bid team, gave a presentation on Auckland and the congress venue, The University of Auckland, and invited all XV ICA participants to attend. Short presentations on future events were then given by Andreas Walzer on the IOBC/WPRS - Working Group "Integrated Control of Plant-Feeding Mites" in Vienna, Austria in September, 2019; by Enrico de Lillo on the European Acarology Congress in Bari, Italy in July, 2020; and by Maria Pappas on the European Congress of Entomology in Hersonissos, Crete, Greece, in 2022. Denise Navia then gave a presentation on the III Latin American Congress of Acarology, which was held from July 29 to August 02, 2018 in Pirenópolis, Goiás, Brazil. Congress president Sebahat K. Ozman-Sullivan then thanked everyone for making XV ICA 2018 a memorable event. She then drew the final curtain on the congress by encouraging all acarologists to meet in Auckland in 2022.

### Miscellaneous issues

**Business of the Executive Committee of the ICA.** The meeting of the Executive Committee (EC) of the International Congress of Acarology (ICA) on 6 September was attended by Peter Schausberger (General Secretary - Austria), Sebahat K. Ozman-Sullivan (Turkey), Mohammed Haq (India), Kimiko Okabe (Japan), Rosta Zemek (Czech Republic) and Xiao-Yue Hong (China). First term members Mohammed Haq, Raphael de Campos Castilho (Brazil), Ronald Ochoa (USA), Rosta Zemek and Kimiko Okabe will remain on the EC until ICA 2022. The outgoing second

term members were Peter Schausberger, Farid Faraji (The Netherlands), Rachid Hanna (Cameroon), Xiao-Yue Hong and Sebahat K. Ozman-Sullivan but due to her role as past president of ICA 2018, she remains on the EC as an ex-officio member until ICA 2022. Kimiko Okabe became the new general secretary of the EC-ICA and Rosta Zemek became its new treasurer.

The EC also selected new members for the five open positions. The inductees were Ali Reza Saboori (Iran), Enrico de Lillo (Italy), Frederic Beaulieu (Canada), Jingze Liu (China) and Marie-Stephane Tixier (France). The EC also selected Gilberto de Moraes (Brazil), Jun-ichi Aoki (Japan) and Mohammed Haq (India) as new Honorary members to join the nine on-going Honorary Members who are Carlos H. W. Flechtmann (Brazil), David R. Cook (USA), Evert E. Lindquist (Canada), Gerald W. Krantz (USA), Michel Bertrand (France), Reinhard Schuster (Austria), Ting-Huan Wen (China), Vikram Prasad (USA), and Yuri Balashov (Russia) who passed away in 2012 (Filippova, 2013).

### Social activities

The welcome reception was held on Monday, 3 September on the seafront in the garden of the Kubbe bar of the congress venue. The cocktails were accompanied by a musical trio who were followed by the dance troupe, Seyyah, which performed a series of high energy, unforgettable traditional folk dances.

The gala dinner was staged on Thursday, 6 September on a boat and it was accompanied by music and dancing. The splendid coastline of Antalya was visible as the boat headed to the spectacular Duden Waterfall which spills into the sea, an impressive sight that is artificially lit at night.

The accompanying persons' tours were three half-day tours, as follows: Monday 3 September - Visit to the ancient city of Perge; Tuesday 4 September - A half day tour to the waterfalls in the area - Kurşunlu Waterfall, Aksu River and Duden Waterfalls; and Thursday 6 September - The destination was Antalya, a city that offers many cultural and natural delights. The tour visited the historic old town of the Ottoman Empire and its historic harbour, and also the shopping bazaar.

The post congress tour was staged on Saturday, 8 September. It was a day full of great natural beauty and fascinating history in one of the most beautiful parts of Turkey. The tour group visited the ruined city of Myra (Demre) with its impressive Lycian tombs carved from rock. The group then viewed the ancient amphitheater and the Church of St Nicholas. That was followed by an enjoyable boat trip on the sea from Theimussa (Ucagiz) to the ancient sunken city of Simena on picturesque Kekova Island (home of the sun) where there was a break for swimming and snorkelling. A fascinating Lycian necropolis of chest type tombs spread out along the coastline at Theimussa. Beneath the turquoise waters along the northern shore of Kekova Island lie the remains of the city of Simena, which was ravaged by earthquakes around two thousand years ago.

## CONCLUDING STATEMENT

On behalf of the Organizing Committee, we greatly appreciate the opportunity to organize XV ICA 2018 in Antalya, Turkey. We believe XV ICA achieved its objective of facilitating the coming together of researchers, students and representatives of institutions worldwide to discuss their latest research results, topical issues and new directions in research. We were very pleased to receive considerable positive feedback about the congress, including that of Zhang (2018b). We trust that you'll want to experience the ICA environment again and that you are already thinking about the next congress. We therefore look forward to meeting with all our acarological friends and colleagues at XVI ICA 2022 in Auckland, New Zealand.

## Acknowledgements

On behalf of the XV ICA 2018 Organizing Committee, we thank: the 11 sponsors; the 15 supporting organisations that included international academic societies and universities; the Executive Committee of the ICA for their support; Zhi-Qiang Zhang for hosting the congress website under the domain <http://www.acarology.org/ica/>; the Scientific Committee members for reviewing the congress abstracts; symposia organisers; keynote speakers; invited speakers; symposium-specific lecture presenters; section chairs; all participants, including Ting-huan Wen and Uri Gerson, for their enthusiasm and making a special

effort to attend the congress; Kosta Y. Mumcuoglu for organizing the medical and veterinary acarology group; Abdullah Unlu for organizing the technical tour; Ozer Akbasli for finding a number of sponsors; Tetsuo Gotoh and Owen Seeman for their contributions; David E. Walter, Ronald Ochoa, Kosta Y. Mumcuoglu, Sevgi Sevsay, Salih Doğan, Sebahat K. Ozman-Sullivan and Mustafa Acici who gave permission for their images to be used on the home page of the congress website; Bilkon Travel Agency for facilitating the congress; Hakki Bayindir from Bilkon for managing the congress website; Mujdat Tos who designed the congress logo; and Gregory T. Sullivan for creating the congress theme. We also sincerely thank all those other people who contributed to the success of the congress.

**"The Acari: very small but impossible to deny!"**



## REFERENCES

- Beaulieu, F. and Behan-Pelletier, V. 2018. Evert E. Lindquist's approach to the taxonomic impediment in acarology: Diversity in specialization through 60 years of systematics research and beyond. *Systematic and Applied Acarology*, 23 (9): 1715-1725.  
doi: 10.11158/saa.23.9.1
- Filippova, N.A. 2013. In memoriam. Yuri Sergeevich Balashov. 25 December 1931-28 September 2012. *The Journal of Parasitology*, 99: 927-928.  
doi: 10.1645/13-298.1
- Flechtmann, C.H.W. 2011. Summary of the history of the International Congress of Acarology. *Acarology XIII: Proceedings of the International Congress, Zoosymposia*, 6: 9-13.  
doi: 10.11646/zoosymposia.6.1.3
- Gotoh, T. and Taylor, D. 2016. Preface. *Journal of the Acarological Society of Japan*, 25 (S1): 1-2.
- Moraes, G.J. de and Proctor, H. 2011. Preface. *Acarology XIII: Proceedings of the International Congress, Zoosymposia*, 6: 3-4.  
doi: 10.11646/zoosymposia.6.1.2
- Walter, D. and Halliday, B. 2018. Professor Emeritus Gerald (Jerry) W. Krantz. Recipient of the James Allen McMurtry Award recognizing a living acarologist who has made outstanding contributions to acarine systematics or applied acarology or both. *Systematic and Applied Acarology*, 23 (9): 1809-1816.  
doi: 10.11158/saa.23.9.7
- Woolley, T.A. (ed.). 1964. 1st International Congress of Acarology, Proceedings. Fort Collins, Colorado, USA, 2-7 September 1963. *Acarologia*, 6: 1-439.

---

Zhang, Z-Q. 2018a. A brief report on the 15<sup>th</sup> International Congress of Acarology and McMurty Award in 2018. *Systematic and Applied Acarology*, 23 (10): 1889-1890.  
doi: [10.11158/saa.23.10.1](https://doi.org/10.11158/saa.23.10.1)

Zhang, Z-Q. 2018b. Recognizing high impact in acarological research. *Systematic and Applied Acarology*, 23 (9): 1494-1496.  
doi: [10.11158/saa.23.7.16](https://doi.org/10.11158/saa.23.7.16)

Edited by: Salih Doğan

Reviewed by: Two anonymous referees

---

**Citation:** Ozman-Sullivan, S.K. and Sullivan, G.T. 2019. An overview of the XV International Congress of Acarology. *Acarological Studies*, 1 (2): 53-58.

---