

Evert E. Lindquist's approach to the taxonomic impediment in Acarology: Diversity in specialization through 60 years of systematics research and beyond

Authors: Beaulieu, Frédéric, and Behan-pelletier, Valerie

Source: Systematic and Applied Acarology, 23(9): 1715-1725

Published By: Systematic and Applied Acarology Society

URL: https://doi.org/10.11158/saa.23.9.1

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.

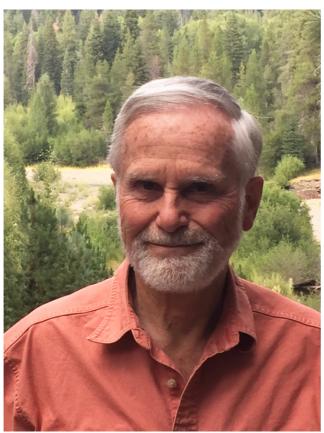
Biography

Evert E. Lindquist's approach to the taxonomic impediment in Acarology: Diversity in specialization through 60 years of systematics research and beyond

FRÉDÉRIC BEAULIEU^{1,2} & VALERIE BEHAN-PELLETIER¹

¹Agriculture and Agri-Food Canada, Canadian National Collection of Insects, Arachnids and Nematodes, Ottawa, Ontario, K1A0C6, Canada

²Corresponding author; email: frederic.beaulieu@agr.gc.ca



Born precisely 72 years after Antonio Berlese, on 26 June 1935, Evert Esplin Lindquist continues to have a profound influence on acarology globally. His ~60-year career significantly strengthened the foundations of acarology through his skills as a systematist, his exceptional attention to detail, his broad curiosity as a biologist, and his dedication to sharing his knowledge through enlightening publications and keen mentoring. Evert Lindquist is also much more than the sum of his acarological career. He is a friend and colleague to most of us, an altruistic scientist, and a cherished collaborator.

Systematics research on Acari

Lindquist is the world's most renowned authority on Ascidae *sensu lato* (now divided into Ascidae, Melicharidae and Blattisociidae), as well as a world expert on Heterostigmata, especially Tarsonemidae. This broad expertise began developing over 60 years ago, when he was a student at the

University of California, Berkeley, from which he later graduated (B.Sc. 1957, M.Sc. 1959, Ph.D. 1963). He attributes his interest in acarology to his involvement in an undergraduate project on an analysis of soil invertebrate samples from Barrow, Alaska, where he was "exposed to the entire diversity of free-living mites from the Barrow area, took the acarology course presented by A. Earl Pritchard, and became fascinated with Acari" (E. E. Lindquist, pers. comm. 2011). This led to his first publication in 1961, on the taxonomy and biology of *Arctoseius* (Ascidae) from Barrow¹, followed in the same year by a publication on the taxonomy and biology of *Tarsonemoides* (Tarsonemidae) parasitizing bark beetle eggs². In these publications on two contrasting acarine

© Her Majesty the Queen in Right of Canada, as represented by the Minister of Agriculture and Agri-Food Canada

groups, he focussed on both the taxonomy *and* biology of each group—a double-double penchant that has persisted throughout his career. Lindquist's Ph.D. thesis⁷ on the systematics of "Blattisocinae" propelled him further into the world of mesostigmatic mites, especially those currently recognized as Blattisociidae (Phytoseioidea), Ascidae and Melicharidae (Ascoidea). Subsequently, he coauthored a pivotal paper with G.O. Evans on the idiosomal chaetotaxy of Gamasina¹¹, which is perhaps the most cited publication on the taxonomy of Mesostigmata in the world, with over 400 citations (Web of Science, 2018). In parallel, his paper on "The world genera of Tarsonemidae[...]with a reclassification of family-group taxa in Heterostigmata" is probably the most cited (>240 citations) publication on the Tarsonemidae and the Heterostigmata: at over 500 pages, some of us refer to it as the bible of Tarsonemidae.

His later publications on the systematics of Ascidae *sensu lato* (34 publications)^{1, 3, 4, 8, 10-12, 19, 22, 55, 56, 60, 63, 66, 68, 78, 79, 88, 93, 99, 102, 103, 105-108, 112, 113, 116, 117, 120, 123, 124, 127, on the idiosomal chaetotaxy of Mesostigmata^{64, 84}, on Tarsonemidae $(17)^2$, 6, 13-15, 18, 21, 24, 33, 34, 40, 45, 46, 80, 90, 94, 129 and related Heterostigmata (>10)^{30, 32, 39, 41, 48, 57, 65, 76, 91, 125} have set a solid phylogenetic footing and terminological basis for future research on these groups.}

Throughout his career, Evert has published over 125 scientific articles¹⁻¹²⁹, representing 96 peer-reviewed publications, 10 book chapters^{42, 43, 69-73, 100, 101, 104}, two books^{74, 122}, and over a dozen miscellaneous publications on mites. In total, he has published over 4100 pages. Of his peer-reviewed publications, 39% are single-authored, and he is the lead author in nearly half of his co-authored publications. He has published with over 80 coauthors, most frequently Marilo Moraza (13 coauthored publications), Dave Walter (12), and Jerry Krantz (5). Retired in 2000, Evert's productivity has not abated, with publications since 2010 surpassing numbers in previous decades (see all publications at the end).

Lindquist's research contributions extend well beyond Ascidae *sensu lato* and Heterostigmata. He (with various coauthors) has published on the systematics of at least 13 other unrelated families or superfamilies of Mesostigmata^{9, 28, 50, 62, 84, 85, 96}, Prostigmata^{20, 51, 74, 89, 119, 128} and Endeostigmata⁵⁹. In addition, he has been involved in several ecological papers focussed on mite communities or their behavior, some with high impact in soil or canopy ecology^{56, 68, 92, 95, 111}, and published influential papers on the evolution of phytophagy in mites^{35, 81} and on mite symbioses with insects^{17, 26, 65}. Some of his reviews on the feeding habits and biology of the subject taxa have remained among the key references for these taxa^{46, 65}. He has published on the use of mites against agricultural and forestry pests^{16, 37}, and on Ixodida⁸⁶, including an invaluable handbook to the ticks of Canada¹²² that covers the diagnosis, biology and pathogens transmitted by tick species in the country.

In collaboration with E.A. Sidorchuk, Evert published significant articles on Cretaceous and Triassic amber fossils of Heterostigmata and Tetrapodili, respectively^{121, 125}. These publications on fossilized ancient relatives of eriophyoids were a nicely expanded sequel to the initial stunning discovery of these Triassic fossils¹¹⁴. Evert's involvement on these studies undoubtedly stemmed from his previous work on Eriophyoidea, particularly his 1996's publication⁶⁹ where he standardized morphological terminology for eriophyoids, based on putative homologies with other mite groups. Evert was lead editor of this volume⁷⁴ and wrote four other chapters dealing with the systematics, diagnosis, phylogenetic relationships, and evolution of eriophyoids in relation to their hosts⁷⁰⁻⁷³. This key publication significantly strengthened the foundation of systematics research on Eriophyoidea. Similarly, Lindquist published two book chapters on Tetranychidae^{42, 43}, in which he standardized terminology for their external anatomy and reviewed the phylogenetic relationships of spider mites and related tetranychoid families. As with his publications on eriophyoids, this placed the systematics research on tetranychoids into a stronger framework.

Another pivotal publication is Lindquist's morphology-based test of monophyly of Acari³⁸. In a tribute to Lindquist in 2011 when he received the Acarological Society of America Award, Gerd

Alberti wrote "Besides his impressive and most competent taxonomic studies, in particular on Heterostigmatina, Eriophyoidea and Mesostigmata, his thoughtful review on *Current Theories on the Evolution of Major Groups of Acari and on their Relationships with other Groups of Arachnida, with Consequent Implications for their Classification*—has fascinated me. For me, it still stands as *the* admirable in-depth state-of-the-art study on this difficult topic."

Evert's broad knowledge of the taxonomy and biology of Mesostigmata and Prostigmata resulted in his involvement in three chapters of the third edition of the 'Krantz and Walter' Manual (2009)^{100, 101, 104}.

During his career, Evert has described nine new families and redescribed or rediagnosed 15; described 37 new genera and rediagnosed >90; and described 132 new species or subspecies and rediagnosed ~90. Just this year, he and coauthors described a new family of Raphignathina that consists of subelytral parasites of dytiscid water beetles¹²⁸ and a new tribe of Tarsonemidae that are parasites of tetrigid grasshoppers¹²⁹. His publications include 33 keys to >170 species; 13 keys to >165 genera; and contributions to two family keys in the Manual of Acarology (2009).

Evert's keen eye for homologizing structures and distinguishing apomorphies from plesiomorphies through broad taxonomic comparisons has been central to his improving the taxonomy of many acarine groups. In particular, he pays attention to ontogeny and immatures stages, recognizing that they contain information that can help elucidate homologies and phylogenetic relationships^{11,84,93,117,119,129}: nearly half of his systematics papers include descriptions of one or more immature stages. Furthermore, Lindquist consistently puts his findings into a broader context, including phylogenetic, evolutionary and ecological. His curiosity and his clear analytical mind led him to many hypotheses and speculations—often with supporting data—on the nature of host associations, feeding habits and structural functions, many of which he published in Remarks or Discussion sections of his publications. His series of papers coauthored with M. Moraza (2008–2018) on flower-, fungus-, and hispine-associated gamasines is one source of examples^{99, 105, 108, 113, 117, 120, 123, 127}, but any earlier publication will reveal similar scientific richness.

With his strong understanding of the International Code of Zoological Nomenclature, Lindquist has worked on resolving nomenclature issues^{11, 25, 28, 39, 70, 96, 118}, including a major one on Eriophyoidea^{27, 31, 49}.

His work at Agriculture and Agri-Food Canada

Lindquist was employed for nearly 40 years (1961–2000) at the Research Branch of Agriculture and Agri-Food Canada (AAFC), Ottawa, where he remains affiliated as an Honorary Research Associate. As Research Scientist, he built the Acari section of the Canadian National Collection of Insects, Arachnids and Nematodes (CNC) from scratch, through collecting trips for mites throughout North America, Mexico and Central America, and with the help of colleagues and subsequent acarologists at AAFC that he helped hire (I.M. Smith, V. Behan-Pelletier, F. Beaulieu, W. Knee, M. Schwarzfeld). Since 1961 he has mentored not only colleagues at AAFC and Canadian and international universities, but also provided his expertise to other government agencies (e.g., Health Canada, Canadian Food Inspection Agency, Environment Canada) and the public through species identifications and advice.

Training of acarologists

Among Lindquist's greatest contributions to acarology is his training of a generation of acarologists, as lecturer at the Acarology Summer Program of The Ohio State University during 1972–1988. Students included: J. H. Camin, J. Kethley, R.A. Norton, C.E. Yunker (1972); N. Fashing, L. Goff, L. Lundquist, G. Mullen, G. Oldfield, A. Paschoal, D. Wrensch (1973); D. Ide, I.M. Smith, D.E. Soneshine, S. Swift (1974); L. B. Coons, B. McDaniel, J. McMurtry, J.A. Yoder (1975/

1976); C. Bowman, J. Hoy, G. de Moraes, L. Watrous, R. Thomas (1978); C. Cramer, G. Nuzzaci, J. Palacios (1979); V. Behan-Pelletier, J. Morales-Malacara, D. Walter (1980/1981); C. Childers, E. de Lillo, H. Klompen, M. Moraza (1983–1987); J. Amrine, M. Kaliszewski, M. Sabelis (1988). As Jim McMurtry said (pers. comm. 2011): "my knowledge of acarine taxonomy was essentially nil. I took the two weeks of agricultural acarology taught solely by Evert. I learned a lot of acarology, and with Evert's encouragement, decided that maybe I could do a bit of taxonomy myself. As one of Evert's successors in the agricultural acarology class, my involvement in teaching for only a few days (phytoseiids and tetranychids) made me appreciate even more the great extent of his knowledge and efforts".

Professional recognition and current research

In addition to teaching acarology at The Ohio State University (1972–1988), he was a visiting lecturer at three institutions in Mexico (Universidad Nacional Autónoma de México, Instituto Politécnico Nacional, and Colegio de Postgraduados) (1983 and 1987), and a collaborator and visiting instructor for the Arthropods of La Selva Project in Costa Rica (1992–1999). He was a member of the International Executive Committee for the Congress of Acarology (1990–1998), and an adjunct professor at Carleton University, Ottawa (1971–1983).

Evert has been honoured through many awards, including: twice by The Ohio State University for outstanding work on the systematics of Acari (1974) and outstanding contributions to agricultural acarology (1988); at the International Congress of Acarology (ICA, 2002), when he became a Honorary Lifetime Member in recognition of outstanding contributions to systematics, phylogenetics, morphology and biodiversity of Acari; by the Latin-American Society of Acarology (2002), in recognition of exceptional contributions to supporting the development of acarology in Latin American countries; and at the Acarological Society of America Annual Meeting in Reno (2011) for his outstanding contributions to acarology. He was also the Keynote speaker for the 10th ICA in Canberra (1998), for which he has published a rich plenary address in the ICA Proceedings⁸⁷ that shows again how thoughtful and visionary Evert Lindquist is.

Evert is currently involved in several taxonomic projects, including one recently submitted for publication, in which he has the anchor role as last author of 14: a revisit of Lindquist *et al.*'s (1979)³⁶ 'Acari of Canada', which reviews the diversity of the acarofauna in the country and taxonomic progress since 1979.

The impact of Evert Lindquist's publications, teaching and mentoring will influence generations to come. He has our admiration and highest respect, and he well deserves the James A. McMurtry Award.

Acknowledgements

We thank Enrico de Lillo, Carl Childers, as well as the recently deceased Gerd Alberti, Jim McMurtry and Gwilym Evans for having shared earlier (2011) their opinions of Evert, which we either quoted in the text, or were a source of inspiration; David E. Walter for editorial comments; Hans Klompen and Orlando Cómbita-Heredia for information about past students at the acarology workshops; and Zhi-Qiang Zhang for the invitation to write this article on our esteemed colleague.

References

1. Lindquist, E.E. (1961) Taxonomic and biological studies of mites of the genus Arctoseius Thor from Barrow, Alaska

- (Acarina: Aceosejidae). *Hilgardia*, 30, 301–350. https://doi.org/10.3733/hilg.v30n11p301
- Lindquist, E.E. & Bedard, W.D. (1961) Biology and taxonomy of mites of the genus *Tarsonemoides* (Acarina: Tarsonemidae) parasitizing eggs of bark beetles of the genus *Ips. The Canadian Entomologist*, 93, 982–999. https://doi.org/10.4039/Ent93982-11
- Lindquist, E.E. (1962) Mucroseius monochami, a new genus and species of mite (Acarina: Blattisocidae) symbiotic with sawyer beetles. Canadian Entomologist, 94, 972–980. https://doi.org/10.4039/Ent94972-9
- Lindquist, E.E. (1963) A taxonomic review of the genus *Hoploseius* Berlese (Acarina: Blattisocidae). *The Canadian Entomologist*, 95, 1175–1185. https://doi.org/10.4039/Ent951175-11
- 5. Chant, D.A., Lindquist, E.E., Martin, J.E.H. & Allen, W.R. (1964) Rupert River by Canoe *The Beaver*, Spring 1964, 32–39.
- 6. Lindquist, E.E. (1964) Mites parasitizing eggs of bark beetles of the genus *Ips. The Canadian Entomologist*, 96, 125–126.
 - https://doi.org/10.4039/Ent96125-1
- Lindquist, E.E. (1964) A revision of mites of the subfamily Blattisocinae (Acarina: Blattisocidae) in America north of Mexico. Part I. Introduction. Part II. Taxonomy of the Blattisocine genera excepting *Proctolaelaps* Berlese. Ph.D. dissertation, University of California. University Microfilsms Inc., # 64-2093, Ann Arbor, MI, 402 pp.
- Lindquist, E.E. & Chant, D.A. (1964) A redescription of *Aceodromus* Muma and its transfer to the Blattisociinae (Acarina: Blattisociidae). *The Canadian Entomologist*, 96, 500–507. https://doi.org/10.4039/Ent96500-3
- Chant, D.A. & Lindquist, E.E. (1965) Nabiseius duplicisetus, a new genus and species of Otopheidomeninae (Acarina: Phytoseiidae) from nabid bugs. The Canadian Entomologist, 97, 515–521. https://doi.org/10.4039/Ent97515-5
- Lindquist, E.E. (1965) An unusual new species of *Hoploseius* Berlese (Acarina: Blattisociidae) from Mexico. *The Canadian Entomologist*, 97, 1121–1131. https://doi.org/10.4039/Ent971121-11
- Lindquist, E.E. & Evans, G.O. (1965) Taxonomic concepts in the Ascidae, with a modified setal nomenclature for the idiosoma of the Gamasina (Acarina: Mesostigmata). *Memoirs of the Entomological Society of Canada*, 47, 1–64. https://doi.org/10.4039/entm9747fv
- 12. Lindquist, E.E. & Hunter, P.E. (1965) Some mites of the genus *Proctolaelaps* Berlese (Acarina: Blattisociidae) associated with forest insect pests. *The Canadian Entomologist*, 97, 15–32. https://doi.org/10.4039/Ent9715-1
- Lindquist, E.E. (1968) An unusual new species of *Tarsonemus* (Acarina: Tarsonemidae) associated with the Indian honey bee. *The Canadian Entomologist*, 100, 1002–1006. https://doi.org/10.4039/Ent1001002-9
- Lindquist, E.E. (1969) New species of *Tarsonemus* (Acarina: Tarsonemidae) associated with bark beetles. *The Canadian Entomologist*, 101, 1291–1314. https://doi.org/10.4039/Ent1011291-12
- Lindquist, E.E. (1969) Review of holarctic tarsonemid mites (Acarina: Prostigmata) parasitizing eggs of ipine bark beetles. *Memoirs of the Entomological Society of Canada*, 60, 1–111. https://doi.org/10.4039/entm10160fv
- Lindquist, E.E. (1969) Mites and the regulation of bark beetle populations. *In*: Evans, G.O. (eds.) *Proceedings of the 2nd International Congress of Acarology*, Sutton Bonington, UK, 19–25 July 1967. Section VIII, Biological Control Budapest, Akademie Kiado, pp. 389–399.
- 17. Lindquist, E.E. (1970) Relationships between mites and insects in forest habitats. *The Canadian Entomologist*, 102, 978–984.
 - https://doi.org/10.4039/Ent102978-8
- Lindquist, E.E. (1970) Review of the genus *Heterotarsonemus* (Acarina: Tarsonemidae). *The Canadian Entomologist*, 102, 812–829. https://doi.org/10.4039/Ent102812-7
- Lindquist, E.E. (1971) New species of Ascidae (Acarina: Mesostigmata) associated with forest insect pests. *The Canadian Entomologist*, 103, 919–942. https://doi.org/10.4039/Ent103919-7
- 20. Lindquist, E.E. & Vercammen-Grandjean, P.H. (1971) Revision of the chigger-like larvae of the genera Neotrombid-

- *ium* Leonardi and *Monunguis* Wharton, with a redefinition of the subfamily Neotrombidiinae Feider in the Trombidiidae (Acarina: Prostigmata). *The Canadian Entomologist*, 103, 1557–1590. https://doi.org/10.4039/Ent1031557-11
- Lindquist, E.E. (1972) A new species of *Tarsonemus* from stored grain (Acarina: Tarsonemidae). *The Canadian Ento-mologist*, 104(11), 1699–1708. https://doi.org/10.4039/Ent1041699-11
- Lindquist, E.E. (1972) An unusual new species of *Asca* from North America (Acarina: Ascidae). *The Canadian Ento-mologist*, 104(10), 1543–1550. https://doi.org/10.4039/Ent1041543-10
- Marshall, V.G. & Lindquist, E.E. (1972) Notes on the genus *Nalepella* (Acarina: Eriophyoidea) and the occurrence of N. halourga on black spruce in Canada. The Canadian Entomologist, 104(2), 239–244. https://doi.org/10.4039/Ent104239-2
- Lindquist, E.E. (1973) Observations on the generic classification of tarsonemid mites (Prostigmata). *In*: Daniel, M. & Rosický, B. (eds.) *Proceedings of the 3rd International Congress of Acarology*, Prague, 31 August–6 September 1971. The Hague, W. Junk, pp. 293–295.
- Lindquist, E.E. (1974) Nomenclatural status and authorship of some family-group names in the Eriophyoidea (Acarina: Prostigmata). *The Canadian Entomologist*, 106(2), 209–212. https://doi.org/10.4039/Ent106209-2
- Lindquist, E.E. (1975) Associations between mites and other arthropods in forest floor habitats. *The Canadian Entomologist*, 107(4), 425–437. https://doi.org/10.4039/Ent107425-4
- Lindquist, E.E. (1975) Comment on the proposed designations of type-species for *Eriophyes* Siebold, 1851 and *Phytoptus* Dujardin, 1851 (Acarina, Eriophyoidea). Z.N.(S.) 2044. *Bulletin of Zoological Nomenclature*, 32(1), 17–18
- Lindquist, E.E. (1975) Digmasellus Berlese, 1905, and Dendrolaelaps Halbert, 1915, with descriptions of new taxa of Digamasellidae (Acarina: Mesostigmata). The Canadian Entomologist, 107(1), 1–43. https://doi.org/10.4039/Ent1071-1
- Lindquist, E.E. & Kethley, J.B. (1975) The systematic position of the Heterocheylidae Tragardh (Acari: Acariformes: Prostigmata). *The Canadian Entomologist*, 107(8), 887–898. https://doi.org/10.4039/Ent107887-8
- Lindquist, E.E. (1976) Transfer of the Tarsocheylidae to the Heterostigmata, and reassignment of the Tarsonemina and Heterostigmata to lower hierarchic status in the Prostigmata (Acari). *The Canadian Entomologist*, 108(1), 23–48. https://doi.org/10.4039/Ent10823-1
- 31. Lindquist, E.E. (1977) Comments on the proposed designations of type-species for *Eriophyes* Siebold, 1851 and *Phytoptus* Dujardin, 1851 (Acarina: Eriophyoidea). Z.N. (S.) 2044. *Bulletin of Zoological Nomenclature*, 33(3–4), 146–148.
- 32. Lindquist, E.E. (1977) Homology of dorsal opisthosomal plates, setae, and cupules of heterostigmatic mites with those of other eleutherengone Prostigmata (Acari). *Acarologia*, 19(1), 97–104.
- 33. Lindquist, E.E. (1978) On the synonomy of *Tarsonemus waitei* Banks, *T. setifer* Ewing, and *T. bakeri* Ewing with redescription of species (Acari: Tarsonemidae). *The Canadian Entomologist*, 110(10), 1023–1048. https://doi.org/10.4039/Ent1101023-10
- Lindquist, E.E. & Smiley, R.L. (1978) Acaronemus, a new genus proposed for tarsonemid mites (Acari: Prostigmata) predaceous on tetranychoid mite eggs. The Canadian Entomologist, 110(6), 655–662. https://doi.org/10.4039/Ent110655-6
- Krantz, G.W. & Lindquist, E.E. (1979) Evolution of phytophagous mites (Acari). *Annual Review of Entomology*, 24, 121–158. https://doi.org/10.1146/annurev.en.24.010179.001005
- 36. Lindquist, E.E., Ainscough, B.D., Clulow, F.V., Funk, R.C., Marshall, V.G., Nesbitt, H.H.J., OConnor, B.M., Smith, I.M. & Wilkinson, P.R. (1979) Acari. *In*: Danks, H.V. (ed.) Canada and its insect fauna. *Memoirs of the Entomological Society of Canada*, 108, 252–290.
- 37. Lindquist, E.E. (1983) Some thoughts on the potential for use of mites in biological control, including a modified concept of "parasitoids". *In*: Hoy, M.A., Cunningham, G.L. & Knutson, L. (eds.) *Biological Control of Pests by Mites*. Proceedings of Conference, pp. 5–7. April 1982. Berkeley. University of California Special Publication No. 3304, pp. 12–20.
- 38. Lindquist, E.E. (1984) Current theories on the evolution of major groups of Acari and on their relationships with other groups of Arachnida, with consequent implications for their classification. *In*: Griffiths, D.A. & Bowman, C.E.

- (eds.). Proceedings of the 6th International Congress of Acarology, Edinburgh, Scotland, Sept. 1982. Vol. 1. Chichester, England, Ellis Horwood Ltd, pp. 28–62.
- 39. Lindquist, E.E. (1985) Authorship of the family-group names Tarsonemidae and Podapolipidae and priority of Scutacaridae over Pygmephoridae (Acari: Heterostigmata). *Acarologia*, 26(2), 141–145.
- Lindquist, E.E. (1985) Description of the adult female of the type-species of *Metatarsonemus* Attiah, with notes on the synonymy of this genus under *Tarsonemus* Can. and Fanz. (Acari: Tarsonemidae). *The Canadian Entomologist*, 117(11), 1279–1285. https://doi.org/10.4039/Ent1171279-11
- 41. Lindquist, E.E. (1985) Discovery of sporothecae in adult female *Trochometridium* Cross, with notes on analogous structures in *Siteroptes* Amerling (Acari: Heterostigmata). *Experimental and Applied Acarology*, 1(1), 73–85. https://doi.org/10.1007/BF01262201
- 42. Lindquist, E.E. (1985) Diagnosis and phylogenetic relationships. *In*: Helle, W. & Sabelis, M.W. (eds.) *Spider Mites: Their Biology, Natural Enemies and Control. World Crop Pests Vol. 1A*. Amsterdam, Elsevier Science Publishers, pp. 63–74.
- 43. Lindquist, E.E. (1985) External anatomy. *In:* Helle, W. & Sabelis, M.W. (eds.) *Spider Mites: Their Biology, Natural Enemies and Control. World Crop Pests Vol. 1A.* Amsterdam, Elsevier Science Publishers, pp. 3–28.
- Lindquist, E.E. (1985) "Arachnida", "Mite", "Tick". In: Marsh, J.H. (ed.-in-chief) The Canadian Encyclopedia. Edmonton, Hurtig Publishers, pp. 70, 1146, 1822.
- Lindquist, E.E. (1986) A means of determining sex in larval Tarsonemidae (Acari: Heterostigmata) based on external structure. Experimental and Applied Acarology, 2(4), 323–328. https://doi.org/10.1007/BF01193898
- 46. Lindquist, E.E. (1986) The world genera of Tarsonemidae (Acari: Heterostigmata): a morphological, phylogenetic, and systematic revision, with a reclassification of family-group taxa in the Heterostigmata. *Memoirs of the Entomological Society of Canada*, 136, 1–517. https://doi.org/10.4039/entm118136fv
- 47. Behan-Pelletier, V.M., Lindquist, E.E. & Smith, I.M. (1987) Subclass Acari (mites and ticks). *In*: Lafontaine, J.D., Allyson, S., Behan-Pelletier, V.M., Borkent, A., Campbell, J.M., Hamilton, K.G.A., Martin, J.E.H. & Masner, L. (eds.) *The insects, Spiders and Mites of Cape Breton Highlands National Park*, Biosystematics Research Centre, Research Branch, Agriculture Canada, pp. 18–66.
- 48. Lindquist, E.E. (1987) Observations on the larva and protonymph of tarsocheylid mites (Acari: Heterostigmata). *Acarologia*, 28(2), 137–150.
- Lindquist, E.E. & Manson, D.C.M. (1987) Case 2044. Eriophyes von Siebold, 1851 and Phytoptus Dujardin, 1851 (Arachnida, Acarina): proposed designation of type species. Bulletin of Zoological Nomenclature, 44(1), 41–43. https://doi.org/10.5962/bhl.part.260
- Lindquist, E.E. & Wu, K.W. (1987) First record of the mite family Podocinidae (Acari, Mesostigmata) in Canada, with notes on other records in North America. *The Canadian Entomologist*, 119(9), 779–781. https://doi.org/10.4039/Ent119779-9
- Lindquist, E.E. & Zacharda, M. (1987) A new genus and species of Rhagidiidae (Acari: Prostigmata) from Chihuahuan Desert litter in New Mexico. *Canadian Journal of Zoology*, 65(9), 2149–2158. https://doi.org/10.1139/z87-328
- 52. Behan-Pelletier, V.M., Lindquist, E.E. & Smith, I.M. (1988) Diversity and distribution patterns of mites. *Proceedings of the XVIIII*th *International Congress of Entomology*, Vancouver, July 1988, 20 pp.
- 53. Lindquist, E.E. (1988) "Arachnida", "Mite", "Tick". *In*: Marsh, J.H. (Ed.) *The Canadian Encyclopedia*, 2nd edition. Edmonton, Hurtig Publishers, 90, 1368, 2158 pp.
- Duncan, R. & Lindquist, E.E. (1989) An unusually copious production of webbing by a willow-inhabiting spider mite, Schizotetranychus schizopus (Zacher). The Canadian Entomologist, 121(12), 1037–1039. https://doi.org/10.4039/Ent1211037-12
- Lindquist, E.E. & Walter, D.E. (1989) Antennoseius (Vitzthumia) janus n. sp. (Acari: Ascidae), a mesostigmatic mite exhibiting adult female dimorphism. Canadian Journal of Zoology, 67, 1291–1310. https://doi.org/10.1139/z89-184
- Walter, D.E. & Lindquist, E.E. (1989) Life history and behavior of mites in the genus *Lasioseius* (Acari: Mesostigmata: Ascidae) from grassland soils in Colorado, with taxonomic notes and description of a new species. *Canadian Journal of Zoology*, 67(11), 2797–2813. https://doi.org/10.1139/z89-396
- 57. Lindquist, E.E., Kaliszewski, M. & Rack, G. (1990) Athyreacaridae, a new family of mites (Acari: Heterostigmata) associated with scarab beetles of the genus *Neoathyreus* (Coleoptera: Scarabaeidae). *Acarologia*, 31(2), 161–176.

- 58. Lankester, M.W., Potter, W.R., Lindquist, E.E. & Wu, K.W. (1991) Deer tick (*Ixodes dammini*) identified in north-western Ontario. *Canada Diseases Weekly Report*, 17–47, 260+263.
- Lindquist, E.E. & Palacios-Vargas, J.G. (1991) Proterorhagiidae (Acari: Endeostigmata), a new family of rhagidiidlike mites from Mexico. *Acarologia*, 32(4), 341–363.
- 60. Lindquist, E.E. & Wu, K.W. (1991) Review of mites of the genus *Mucroseius* (Acari: Mesostigmata: Ascidae) associated with sawyer beetles (Cerambycidae: *Monochamus* and *Mecynippus*) and pine wood nematodes [Aphelenochoididae: *Bursaphelenchus xylophilus* (Steiner and Buhrer) Nickle], with descriptions of six new species from Japan and North America, and notes on their previous misidentification. *The Canadian Entomologist*, 123(4), 875–927. https://doi.org/10.4039/Ent123875-4
- 61. Lindquist, E.E. (1993) Foreword. *In*: Houck, M.A. (eds.) *Mites: Ecological and Evolutionary Analyses of Life-History Patterns*. New York, Chapman & Hall, pp. ix–xii.
- Lindquist, E.E. & Moraza, M.L. (1993) Pyrosejidae, a new family of trigynaspid mites (Acari: Mesostigmata: Cercomegistina) from Middle America. *Acarologia*, 34(4), 283–307.
- 63. Walter, D.E., Halliday, R.B. & Lindquist, E.E. (1993) A review of the genus *Asca* (Acarina: Ascidae) in Australia, with descriptions of three new leaf-inhabiting species. *Invertebrate Taxonomy*, 7(6), 1327–1347. https://doi.org/10.1071/IT9931327
- 64. Lindquist, E.E. (1994) Some observations on the chaetotaxy of the caudal body region of gamasine mites (Acari: Mesostigmata), with a modified notation for some ventrolateral body setae. *Acarologia*, 35(4), 323–326.
- 65. Kaliszewski, M., Athias-Binche, F. & Lindquist, E.E. (1995) Parasitism and parasitoidism in Tarsonemina (Acari: Heterostigmata) and evolutionary considerations. *Advances in Parasitology*, 35, 335–367.
- 66. Lindquist, E.E. (1995) Remarkable convergence between two taxa of ascid mites (Acari: Mesostigmata) adapted to living in pore tubes of bracket fungi in North America, with description of *Mycolaelaps* new genus. *Canadian Journal of Zoology*, 73(1), 104–128. https://doi.org/10.1139/z95-013
- 67. Sweeney, J., Gesner, G., McClure, M., Thurston, G., Behan-Pelletier, V., Lindquist, E. & Renault, T. (1995) Impact of Entomopathogenic Nematodes on Abundance and Diversity of Nontarget Arthropods. Final Report to Review Committee for Forest Pest Management Alternatives/ Minor Use Fund at Natural Resources Canada. Canadian Forest Service, Sault Ste. Marie, 15 pp.
- 68. Walter, D.E. & Lindquist, E.E. (1995) The distributions of parthenogenetic ascid mites (Acari: Parasitiformes) do not support the biotic uncertainty hypothesis. *Experimental and Applied Acarology*, 19(8), 423–442.
- Lindquist, E.E. (1996) External anatomy and notation of structures. *In*: Lindquist, E.E., Sabelis, M.W. & Bruin, J. (eds.) *World Crop Pests*. Amsterdam, Elsevier Science Publishers. World Crop Pests, Vol. 6. Chapter 1.1.1, pp. 3–31.
- 70. Lindquist, E.E. (1996) Nomenclatorial problems in usage of some family and genus names. *In*: Lindquist, E.E., Sabelis, M.W. & Bruin, J. (eds.) *Eriophysioid Mites: Their Biology, Natural Enemies and Control*, 6. Amsterdam, Elsevier Science Publishers. World Crop Pests, Vol. 6. Chapter 1.1.3, pp. 89–99.
- Lindquist, E.E. (1996) Phylogenetic relationships. *In*: Lindquist, E.E., Sabelis, M.W. & Bruin, J. (eds.) *Eriophyioid Mites: Their Biology, Natural Enemies and Control*. Amsterdam, Elsevier Science Publishers. World Crop Pests, Vol. 6. Chapter 1.5.2., pp. 301–327.
- Lindquist, E.E. & Amrine, J.W., Jr. (1996) Systematics, diagnoses for major taxa, and keys to families and genera
 with species on plants of economic importance. *In*: Lindquist, E.E., Sabelis, M.W. & Bruin, J. (eds.) *Eriophyoid*Mites. Their Biology, Natural Enemies and Control. World Crop Pests Series Vol. 6. Amsterdam, Elsevier Science
 Publishers. World Crop Pests, Vol. 6. Chapter 1.1.2, pp. 33–87.
- 73. Lindquist, E.E. & Oldfield, G.N. (1996) Evolution of eriophyoid mites in relation to their host plants. In: Lindquist, E.E., Sabelis, M.W. & Bruin, J. (eds.) *Eriophyoid Mites: Their Biology, Natural Enemies and Control.* Amsterdam, Elsevier Science Publishers. World Crop Pests, Vol. 6. Chapter 1.5.1, pp. 277–300.
- 74. Lindquist, E.E., Sabelis, M.W. & Bruin, J. (eds.) (1996) Eriophyoid Mites. Their Biology, Natural Enemies and Control. World Crop Pests, Vol. 6, Elsevier, 790 pp.
- 75. Walter, D.E., Krantz., G.W. & Lindquist, E.E. (1996) Acari. The Mites. Version 13 December 1996. http://tolweb.org/ Acari/2554/1996.12.13. *The Tree of Life Web Project*. http://tolweb.org/ (Accessed 8 August 2018).
- Lindquist, E.E. (1997) Antiquity of some symbiotic associations of heterostigmatic mite clades with beetle clades: phylogenetic and biogeographic patterns. *In*: Needham, G.R., Mitchell, R., Horn, D.J. & Welbourn, W.C. (eds.) *Acarology IX: Proceedings of the IXth International Congress of Acarology*, Columbus, July 1994. Columbus, OH, Ohio Biological Survey, pp. 301–303.
- 77. Smith, I.M., Lindquist, E.E. & Behan-Pelletier, V. (1997) Mites (Acari). *In*: Smith, I.M. (ed.) *Assessment of species diversity in the Mixedwood Plains Ecozone*. Printed summary. CD-ROM. Burlington, Canada, Ecological Monitoring and Assessment Network, pp. 16–17. previously at http://www.naturewatch.ca/Mixedwood/mites/intro.htm.

- Walter, D.E. & Lindquist, E.E. (1997) Australian species of *Lasioseius* (Acari: Mesostigmata: Ascidae): the *porulo-sus* group and other species from rainforest canopies. *Invertebrate Taxonomy*, 11(4), 525–547. https://doi.org/10.1071/IT96003
- Halliday, R.B., Walter, D.E. & Lindquist, E.E. (1998) Revision of the Australian Ascidae (Acarina: Mesostigmata). *Invertebrate Taxonomy*, 12(1), 1–54. https://doi.org/10.1071/IT96029
- Kim, J.-S., Qin, T.-K. & Lindquist, E.E. (1998) Description of *Tarsonemus parawaitei*, a new species of Tarsonemidae (Acari: Heterostigmata) associated with orchard and ornamental plants in Europe, Australia and New Zealand. *Systematic and Applied Acarology Special Publications*, 2, 1–28. https://doi.org/10.11158/saasp.2.1.1
- Lindquist, E.E. (1998) Evolution of phytophagy in trombidiform mites. Experimental and Applied Acarology, 22(2), 81–100. https://doi.org/10.1023/A:1006041609774
- 82. Lindquist, E.E. (1998) Arthropods associated with livestock dung: predatory mesostigmatic mites associated with filth flies. *In*: Gibson, G. & Read, J. (eds.) *Animal Protection Systematics Study*. http://canacoll.org/Hym/Staff/Gibson/apss/mitetaxa.htm (Accessed 8 August 2018).
- 83. Lindquist, E.E. (1998) Ticks and animal health: ticks. *In*: Gibson, G. & Read, J. (eds.) *Animal Protection Systematics Study*. http://canacoll.org/Hym/Staff/Gibson/apss/tickhome.htm (Accessed 8 August 2018).
- 84. Lindquist, E.E. & Moraza, M.L. (1998) Observations on homologies of idiosomal setae in Zerconidae (Acari: Mesostigmata), with modified notation for some posterior body setae. *Acarologia*, 39(3), 203–226.
- 85. Moraza, M.L. & Lindquist, E.E. (1998) Coprozerconidae, a new family of zerconoid mites from North America (Acari: Mesostigmata: Zerconoidea). *Acarologia*, 39(4), 291–313.
- Lindquist, E.E., Wu, K.W. & Redner, J.H. (1999) A new species of the tick genus *Ixodes* (Acari: Ixodidae) parasitic on mustelids (Mammalia: Carnivora) in Canada. *The Canadian Entomologist*, 131(2), 151–170. https://doi.org/10.4039/Ent131151-2
- 87. Lindquist, E.E. (2001) Poising for a new century: diversification in acarology. *In*: Halliday, R.B., Walter, D.E., Proctor, H.C., Norton, R.A. & Colloff, M.J. (eds.) *Acarology X: Proceedings of the 10th International Congress*. Melbourne, Australia, CSIRO Publishing, pp. 17–34.
- 88. Walter, D.E. & Lindquist, E.E. (2001) *Arrhenoseius gloriosus* n. g., n. sp. (Acari: Mesostigmata: Ascidae), an arrhenotokous mite from rainforests in Queensland, Australia. *Acarologia*, 41(1–2), 53–68.
- 89. Baker, A.S. & Lindquist, E.E. (2002) *Aethosolenia laselvensis* gen. nov., sp. nov., a new eupodoid mite from Costa Rica (Acari: Prostigmata). *Systematic and Applied Acarology Special Publications*, 11, 1–11.
- 90. de Moraes, G.J., Lindquist, E.E. & Lofego, A.C. (2002) A new genus and species of tarsonemid mite (Acari: Tarsonemidae) associated with a neotropical curculionid beetle (Coleoptera). *Invertebrate Systematics*, 16(5), 687–695. https://doi.org/10.1071/IT01030
- 91. Lindquist, E.E. & Krantz, G.W. (2002) Description of, and validation of names for, the genus *Crotalomorpha* and the family Crotalomorphidae (Acari: Heterostigmata). *Systematic and Applied Acarology*, 7, 129–142. https://doi.org/10.11158/saa.7.1.14
- 92. St. John, M.G., Bagatto, G., Behan-Pelletier, V., Lindquist, E.E., Shorthouse, J.D. & Smith, I.M. (2002) Mite (Acari) colonization of vegetated mine tailings near Sudbury, Ontario, Canada. *Plant and Soil*, 245(2), 295–305. https://doi.org/10.1023/A:1020453912401
- 93. Lindquist, E.E. (2003) Observations on mites of the subfamily Platyseiinae, with descriptions of two new species of *Platyseius* from North America (Acari: Mesostigmata: Ascidae). *In*: Smith, I.M. (ed.) *An Acarological Tribute to David R. Cook (from Yankee Springs to Wheeny Creek)*. West Bloomfield, MI, Indira Publishing House, pp. 155–182.
- 94. Magowski, W.L., Lindquist, E.E. & Moser, J.C. (2005) *Giselia arizonica*, a new genus and species of mite (Acari: Tarsonemidae) associated with bark beetles of the genus *Pseudopityophthorus* (Coleoptera: Scolytidae) in North America. *The Canadian Entomologist*, 137(6), 648–656. https://doi.org/10.4039/n05-035
- 95. Fagan, L.L., Didham, R.K., Winchester, N.N., Behan-Pelletier, V., Clayton, M., Lindquist, E. & Ring, R.A. (2006) An experimental assessment of biodiversity and species turnover in terrestrial vs canopy leaf litter. *Oecologia*, 147(2), 335–347.
 - https://doi.org/10.1007/s00442-005-0262-6
- 96. Halliday, R.B. & Lindquist, E.E. (2007) Nomenclatural notes on the names *Gaeolaelaps* and *Geolaelaps* (Acari: Laelapidae). *Zootaxa*, 1621, 65–67.
- 97. Behan-Pelletier, V.M. & Lindquist, E.E. (2007–2018) "Mite". *In*: Aronovitch, D. (ed.) *The Canadian Encyclopedia*, Hurtig Publishers. https://www.thecanadianencyclopedia.ca/en/article/mite/ (Accessed 8 August 2018).

- 98. Lindquist, E.E. (2007–2018) "Arachnida", "Tick". *In*: Aronovitch, D. (eds.) *The Canadian Encyclopedia*, Hurtig Publishers. https://www.thecanadianencyclopedia.ca/en/article/arachnida/ and https://www.thecanadianencyclopedia.ca/en/article/tick/ (Accessed 8 August 2018).
- 99. Lindquist, E.E. & Moraza, M.L. (2008) A new genus of flower-dwelling melicharid mites (Acari: Mesostigmata: Ascoidea) phoretic on bats and insects in Costa Rica and Brazil. *Zootaxa*, 1685, 1–37.
- 100. Lindquist, E.E., Krantz, G.W. & Walter, D.E. (2009) Classification. *In*: Krantz, G.W. & Walter, D.E. (ed.) *A Manual of Acarology*. 3rd Edition. Lubbock, TX, Texas Tech University Press, pp. 97–103.
- 101. Lindquist, E.E., Krantz, G.W. & Walter, D.E. (2009) Order Mesostigmata. *In*: Krantz, G.W. & Walter, D.E. (eds.) *A Manual of Acarology*. 3rd Edition. Lubbock, TX, Texas Tech University Press, pp. 124–232.
- 102. Lindquist, E.E. & Moraza, M.L. (2009) *Anystipalpus*, *Antennoseius* and *Vitzthumia*: a taxonomic and nomenclatural conundrum of genera (Acari: Mesostigmata: Dermanyssina), with description of four species of *Anystipalpus*. *Zootaxa*, 2243, 1–39.
- 103. Mineiro, J.L.D.C., Lindquist, E.E. & De Moraes, G.J. (2009) Edaphic ascid mites (Acari: Mesostigmata: Ascidae) from the state of São Paulo, Brazil, with description of five new species. *Zootaxa*, 2024, 1–32.
- 104. Walter, D.E., Lindquist, E.E., Smith, I.M., Cook, D.R. & Krantz, G.W. (2009) Order Trombidiformes. *In*: Krantz, G.W. & Walter, D.E. (eds.) *A Manual of Acarology*. 3rd Edition. Lubbock, Texas Tech University Press, pp. 233–420.
- 105. Lindquist, E.E. & Moraza, M.L. (2010) Revised diagnosis of the family Blattisociidae (Acari: Mesostigmata: Phytoseioidea), with a key to its genera and description of a new fungus-inhabiting genus from Costa Rica. *Zootaxa*, 2479, 1–21.
- 106. Britto, E.P.J., Lindquist, E.E. & de Moraes, G.J. (2011) Redescription of *Lasioseius floridensis* Berlese, 1916 (Acari: Mesostigmata: Blattisociidae), with notes on closely related species. *Zootaxa*, 2905, 1–15.
- Lindquist, E.E. & Makarova, O.L. (2011) Two new circumpolar mite species of the genus *Arctoseius* Thor, (Parasitiformes, Mesostigmata, Ascidae). *Zoologicheskii Zhurnal*, 90(8), 923–941. https://doi.org/10.1134/S0013873811080100
- 108. Moraza, M.L. & Lindquist, E.E. (2011) A new genus of fungus-inhabiting blattisociid mites (Acari: Mesostigmata: Phytoseioidea) from Middle America, with a key to genera and subgenera of the subfamily Blattisociinae. *Zootaxa*, 2758, 1–25.
- 109. Navia, D., Flechtmann, C.H.W., Lindquist, E.E. & Aguilar, H. (2011) A new species of *Abacarus* (Acari: Prostigmata: Eriophyidae) damaging sugarcane, *Sacharrum officinarum* L., from Costa Rica—the first eriophyoid mite described with a tibial seta on leg II. *Zootaxa*, 3025, 51–58.
- 110. Smith, I.M., Lindquist, E.E. & Behan-Pelletier, V.M. (2011) Mites (Acari). *In*: Scudder, G.G.E. & Smith, I.M. (eds.) *Assessment of Species Diversity in the Montane Cordillera Ecozone*. https://royalbcmuseum.bc.ca/assets/Montane-Cordillera-Ecozone.pdf (Accessed 8 August 2018), pp. 193–268.
- Jauharlina, J., Lindquist, E.E., Quinnell, R.J., Robertson, H.G. & Compton, S.G. (2012) Fig wasps as vectors of mites and nematodes. *African Entomology*, 20(1), 101–110. https://doi.org/10.4001/003.020.0113
- 112. Lindquist, E.E. & Makarova, O.L. (2012) Review of the mite subfamily Arctoseiinae Evans with a key to its genera and description of a new genus and species from Siberia (Parasitiformes, Mesostigmata, Ascidae). *ZooKeys*, 233, 1–20.
- http://dx.doi.org/10.3897/zookeys.233.3862.
- 113. Lindquist, E.E. & Moraza, M.L. (2012) A new genus of fungus-inhabiting mites of the family Blattisociidae (Acari: Mesostigmata: Phytoseoidea) from Costa Rica, with an updated key to genera of the subfamily Blattisociinae. *Redia*, 95, 9–19.
- 114. Schmidt, A.R., Jancke, S., Lindquist, E.E., Ragazzi, E., Roghi, G., Nascimbene, P.C., Schmidt, K., Wappler, T. & Grimaldi, D.A. (2012) Arthropods in amber from the Triassic Period. *Proceedings of the National Academy of Sciences*, 109(37), 14796–14801. https://doi.org/10.1073/pnas.1208464109
- 115. Lumley, L., Beaulieu, F., Behan-Pelletier, V., Knee, W., Lindquist, E.E., Mark, M., Proctor, H. & Walter, D. (2013) The status of systematic knowledge of the Acari of Canada: tickin' away with some mitey progress. *Newsletter of the Biological Survey of Canada*, 32(2), 23–37.
- 116. Makarova, O.L. & Lindquist, E.E. (2013) A new species of the gamasid mite genus *Arctoseius* Thor, 1930 (Parasiti-formes, Mesostigmata, Ascidae) from Russia with a key to the *multidentatus* species-group. *ZooKeys*, 313, 9–24. https://doi.org/10.3897/zookeys.313.5317
- 117. Lindquist, E.E. & Moraza, M.L. (2014) Mites coexistent with neotropical hispine beetles in unfurled leaves of *Heliconia*: a new genus and family of the Ascoidea (Acari: Mesostigmata: Gamasina). *Journal of Natural History*, 48(27–28), 1611–1651.

- https://doi.org/10.1080/00222933.2013.877995
- Lindquist, E.E. (2015) Comments on Collohmannia Sellnick, 1922 (Arachnida, Acari, Oribatida): proposed conservation by giving it precedence over the senior subjective synonym Embolacarus Sellnick, 1919 (Case 3674). Bulletin of Zoological Nomenclature, 72(2), 153.
- 119. Lindquist, E.E. & Sidorchuk, E.A. (2015) The labidostommatid palpus: a morphological enigma (Acariformes: Prostigmata). *Acarologia*, 55(3), 337–350. https://doi.org/10.1051/acarologia/20152172
- 120. Moraza, M.L. & Lindquist, E.E. (2015) Systematics and biology of mites associated with neotropical hispine beetles in unfurled leaves of *Heliconia*, with descriptions of two new genera of the family Melicharidae (Acari: Mesostigmata: Gamasina: Ascoidea). *Zootaxa*, 3931(3), 301–351. https://doi.org/10.11646/zootaxa.3931.3.1
- Sidorchuk, E.A., Schmidt, A.R., Ragazzi, E., Roghi, G. & Lindquist, E.E. (2015) Plant-feeding mite diversity in Triassic amber (Acari: Tetrapodili). *Journal of Systematic Palaeontology*, 13(2), 129–151. https://doi.org/10.1080/14772019.2013.867373
- 122. Lindquist, E.E., Galloway, T.D., Artsob, H., Lindsay, L.R., Drebot, M., Wood, H. & Robbins, R.G. (2016) *A Hand-book to The Ticks of Canada* (Ixodida: Ixodidae, Argasidae). *Biological Survey of Canada Monograph Series*, 6, 1–317.
- 123. Lindquist, E.E. & Moraza, M.L. (2016) A new genus of mites of the subfamily Platyseiinae associated with *Azteca* ant galleries in *Cecropia* trees in Costa Rica (Acari: Mesostigmata: Blattisociidae). *Acarologia*, 56(3), 293–319. https://doi.org/10.1051/acarologia/20162242
- 124. Moraza, M.L. & Lindquist, E.E. (2016) New species and biological data for the neotropical genus *Hispiniphis* (Acari: Mesostigmata: Melicharidae) associated with hispine beetles, genus *Cephaloleia*, in unfurled leaves of *Heliconia*. *Systematic and Applied Acarology*, 21(1), 85–118. https://doi.org/10.11158/saa.21.1.7
- 125. Sidorchuk, E.A., Perrichot, V. & Lindquist, E.E. (2016) A new fossil mite from French Cretaceous amber (Acari: Heterostigmata: Nasutiacaroidea superfam. nov.), testing evolutionary concepts within the Eleutherengona (Acariformes). *Journal of Systematic Palaeontology*, 14(4), 297–317. https://doi.org/10.1080/14772019.2015.1046512
- Di Palma, A., Krantz, G.W., Lindquist, E.E. & Norton, R.A. (2017) An homage to Prof. Dr. Gerd Alberti (1943–2016). *Acarologia*, 57(2), 459–461. https://doi.org/10.1051/acarologia/20174169
- 127. Moraza, M.L. & Lindquist, E.E. (2018) A new species-group with new species of the genus *Lasioseius* (Acari: Mesostigmata: Blattisociidae) associated with neotropical hispine beetles in furled leaves of *Heliconia*. *Acarologia*, 58(1), 62–98. https://doi.org/10.24349/acarologia/20184227
- 128. Mortazavi, A., Hajiqanbar, H. & Lindquist, E.E. (2018) A new family of mites (Acari: Prostigmata: Raphignathina), highly specialized subelytral parasites of dytiscid water beetles (Coleoptera: Dytiscidae: Dytiscinae). *Zoological Journal of the Linnean Society*, 1–55. https://doi.org/10.1093/zoolinnean/zlx113
- 129. Seeman, O.D., Lindquist, E.E. & Husband, R.W. (2018) A new tribe of tarsonemid mites (Trombidiformes: Heterostigmatina) parasitic on tetrigid grasshoppers (Orthoptera). *Zootaxa*, 4418(1), 1–54. http://dx.doi.org/10.11646/zootaxa.4418.1.1

Submitted: 17 Aug. 2018; accepted by Zhi-Qiang Zhang: 17 Aug. 2018; published: 29 Aug. 2018