Updates on the Cecilia P. Reyes Collection of Philippine Thrips (Insecta: Thysanoptera)

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The Cecilia P. Reyes Collection of Philippine thrips consists of 38 new species involving 9 new genera, namely, Amphidoxothrips Reyes, Filipinothrips Reyes, Gemmathrips Reyes, Hemingia Reyes, Praeciputhrips Reyes, Propealiothrips Reves, Propesolomonthrips Reyes, Psephenothrips Reyes and Rosingothrips Reyes, and hundreds of thrips specimens known to science. The insects were collected from different localities in Luzon including Mindoro and Palawan, Visayas, and Mindanao (Reyes, 1994, 1996, &1997). Of these, 35 new species were included in the monograph of thrips of the Philippine Islands, which was published by the National University of Singapore's Raffles Bulletin of Zoology, complete with illustrated keys, descriptions, distributional data, and plant associates of 187 species in 2 suborders and 3 families, namely, Aeolothripidae, Thripidae, and Phlaeothripidae.

Thrips are small winged insects of considerable economic importance. Their habitats range from forests and grasslands to gardens and crops. A number of species are known as predators of mites in orchards and gardens, while numerous species are known to be serious pests of ornamentals, vegetables, fruit trees, and field crops in many countries (Reyes & Funderburk, 2006). Thrips are also pests of seedling cotton in Australia, and their damage can delay crop maturity (Miyasaki et al., 2017). In the Philippines, thrips are known as pests of banana, mango, pineapple, watermelon, peanut, sugarcane, rice, corn, tobacco, pepper, tomato, onion, garlic, eggplant, orchids, anthuriums, roses, and many other vegetable and ornamental plants (Reyes, 1990a, and Bernardo, 1991). Thrips damage the plants by piercing the plant tissue with their mouthparts and then sucking up the released plant juices. The damage creates injury spots on leaves that enable bacteria, virus, and fungi to gain entry, thus increasing disease problems of plants. Fourteen thrips species are known as exclusive vectors of tomato spotted wilt virus (TSWV), a virus with six known strains

and with a wide host range (Riley et al., 2011), of which 5 species are known in the Philippines, namely, *Thrips palmi* (melon, eggplant, potato, highly polyphagous thrips), *Thrips tabaci* (onion, garlic, tobacco thrips), *Scirtothrips dorsalis* (tomato, pepper, mango, highly polyphagous thrips), *Frankliniella intonsa* (on numerous flowering plants), and *Frankliniella schultzei* (on numerous flowering plants). The TSWV disease is a continuing threat to the production of tomato, pepper, potato, lettuce, and cucumber and of great interest to plant quarantine authorities.

The thrips fauna of the Philippines is allied to Malaysia, Indonesia, and Taiwan, and the thrips fauna of Southeast Asia is allied to New Guinea and Australia (Reyes, 1990a & 1990b). To ensure that information concerning the Cecilia P. Reyes Collection will continue to be available to researchers and students worldwide, holotypes, allotypes, paratypes, and general thrips collection were deposited in the Australian National Insect Collection, Australia, in 2010 (Mound, 2011); Museum of Natural History, UK, in 2016; Philippine National Museum in 2005; University of Alberta, Canada, in 1990; and the CPReyes Thrips Collection at De La Salle University, Philippines. Detailed information and contact person of depository institutions are hereby provided.

C P REYES COLLECTION

Thrips Species:

- 1. Apelaunothrips makilingae Reyes, 3 female paratypes
- 2. Ceratothrips reticulatus Reyes, 1 female paratype
- 3. Compsothrips furvus Reyes, female
- 4. Filipinothrips baltazarae Reyes, 3 female paratypes + female

- 5. Gemmathrips brevis Reyes, male allotype + 3 male paratypes + 5 male + 4 female paratypes + 2 female
- 6. *Gynaikothrips pedanus* Reyes, 7 female paratypes
- 7. *Gynaikothrips pontis* Reyes, female paratype + male
- 8. *Gynaikothrips xynos* Reyes, female paratype + 5 female
- 9. Helionothrips guttatus Reyes, 8 female paratypes + 7 male paratypes + male + 8 female
- 10. *Javathrips ciliaris* Reyes, 2 female paratypes + male paratype
- 11. Javathrips variegatus Reyes, 5 female paratypes + 1 male paratype + 13 female + 4 male
- 12. *Karnyothrips ateuchis* Reyes, 1 female paratype + female
- 13. *Karnyothrips expandosus* Reyes, female paratype + male paratype
- 14. Pachaetothrips stepheni Reyes, 4 female paratypes + 2 female
- 15. Praeciputhrips balli Reyes, 2 female paratypes + 2 male paratypes
- 16. Praepodothrips causiapeltus Reyes, 4 male paratypes
- 17. *Propealiothrips moundi* Reyes, male paratype
- 18. Rosingothrips ommatus Reyes, 3 female paratypes + male paratype
- 19. Stenchaetothrips spinalis Reyes, 6 female paratypes
- 20. *Trichromothrips bruncurrum* Reyes, 3 male paratypes + male
- 21. Thrips palmerae Reyes, 2 female paratypes
- 22. Tusothrips atrichotus Reyes, female paratype
- 23. *Tusothrips immaculatus* Reyes, female paratype

AUSTRALIAN NATIONAL INSECT COLLECTION

CSIRO Black Mountain Canberra, Australia Contact Person: Dr. Laurence A. Mound E-mail: laurence.mound@csiro.au Website: http://anic.ento.csiro.au/thrips

Thrips Species:

- 1. *Adelphothrips longisetosus* Reyes, female holotype + female
- 2. Amphidoxothrips armatus Reyes, female holotype
- 3. Apelaunothrips makilingae Reyes, female holotype + male allotype
- 4. *Ceratothrips reticulatus* Reyes, female holotype + male allotype
- 5. Compsothrips furvus Reyes, female holotype + male
- 6. *Dendrothripoides nakaharai* Reyes, female holotype + male allotype
- 7. Dendrothrips virgulatus Reyes, female holotype + female paratype
- 8. Dolichothrips crassusensus Reyes, female holotype
- 9. Franklinothrips rarosae Reyes, male holotype + female allotype
- 10. Filipinothrips baltazarae Reyes, female holotype + female paratype
- 11. *Javathrips ciliaris* Reyes, female holotype + male allotype
- 12. *Javathrips variegatus* Reyes, female holotype + male allotype
- 13. *Gemmathrips brevis* Reyes, female holotype +male allotype
- 14. *Gynaikothrips capitulatus* Reyes, female holotype
- 15. *Gynaikothrips pedanus* Reyes, female holotype + female paratype
- 16. *Gynaikothrips pontis* Reyes, female holotype + male allotype
- 17. *Gynaikothrips xynos* Reyes, female holotype + female paratype

- 18. *Helionothrips guttatus* Reyes, female holotype + male allotype
- 19. *Hemingia glandula* Reyes, female holotype + male allotype
- 20. *Karnyothrips ateuchis* Reyes, female holotype + male allotype
- 21. *Karnyothrips expandosus* Reyes, female holotype + male allotype
- 22. Leeuwenia arbastoae Reyes, female holotype
- 23. *Mesothrips ignotus* Reyes, male holotype
- 24. *Neohydatothrips calilungae* Reyes, male holotype + male paratype
- 25. *Panchaetothrips stepheni* Reyes, female holotype + female paratype
- 26. Pseudodendrothrips maculosus Reyes, female holotype
- 27. Stenchaetothrips spinalis Reyes, female holotype + female paratype
- 28. Streothrips alaris Reyes, female holotype
- 29. *Thrips palmerae* Reyes, female holotype + female paratype
- 30. *Trichromothrips bruncurrum* Reyes, male holotype + male paratype
- 31. *Praeciputhrips balli* Reyes, female holotype + male allotype
- 32. *Praepodothrips causiapeltus* Reyes, female holotype + male allotype
- 33. *Propealiothrips moundi* Reyes, male holotype + female allotype
- 34. Propesolomonthrips mindorensis Reyes, male holotype
- 35. *Psephenothrips strasseni* Reyes, female holotype
- 36. *Rosingothrips ommatus* Reyes, female holotype + male allotype
- 37. *Tusothrips atrichotus* Reyes, female holotype + female paratype
- 38. *Tusothrips immaculatus* Reyes, female holotype + female paratype

NATURAL HISTORY MUSEUM

Cromwell Road, London United Kingdom

Contact Person: Mr. Paul A. Brown

E-mail: p.brown@nhm.ac.uk Website: http://www.nhm.ac.uk

Thrips Species:

- 1. Apelaunothrips makilingae Reyes, male paratype
- 2. Ceratothrips reticulatus Reyes, 2 female paratypes
- 3. Compsothrips furvus Reyes, female
- 4. *Dendrothripoides nakaharai* Reyes, female paratype + male paratype
- 5. Filipinothrips baltazarae Reyes, 2 female paratypes
- 6. Franklinothrips rarosae Reyes, male paratype
- 7. Gemmathrips brevis Reyes, female paratype
- 8. *Helionothrips guttatus* Reyes, 2 female paratypes
- 9. *Hemingia glandula* Reyes, 2 female paratypes
- 10. Javathrips ciliaris Reyes, 2 female paratypes
- 11. *Karnyothrips ateuchis* Reyes, female paratype + male paratype
- 12. *Panchaetothrips stepheni* Reyes, female paratype + female
- 13. *Propealiothrips moundi* Reyes, 2 male paratypes
- 14. *Psephenothrips strasseni* Reyes, female paratypes
- 15. Rosingothrips ommatus Reyes, female paratype

PHILIPPINE NATIONAL MUSEUM

P. Burgos Street, Rizal Park Manila, Philippines Contact Person: Mr. Virgilio S. Palpalatoc E-mail: natmus_zoo@yahoo.com.ph Website: http://www.nationalmuseum gov.ph

Thrips Species:

General thrips collection from the Philippines (undetermined number of specimens in 46 plastic and 5 wood slide boxes)

UNIVERSITY OF ALBERTA

Strickland Museum
Department of Biological Sciences
Edmonton, Canada
Contact Person: Dr. Bruce S. Heming
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Website: https://www.ualberta.cascience

Thrips Species:

General thrips collection from the Philippines (undetermined number of specimens in a number of plastic slide boxes)

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