**Table 1. Summary of collection data of millipedes and parasitic nematodes**

Location Host millipede (number) Nematode (Accession No.)

1. Chubu University, Kasugai city *P. laminata* CU *R. naylae* (MT988356 - MT988360)

Aichi Prefecture (N=113) *T. claudiae* (MT988324, MT988325, MT988326)

35°16'21.6"N 137°00'50.3"E *P. tonominea* species complex CU  *R. naylae* (MT988354, MT988355)

(N=82) *T. claudiae* (MT988321, MT988322, MT988323)

2. Mt. Kinka, Gifu city *P. laminata* Kinka *R. naylae* (MT988366, MT988367)

Gifu Prefecture (N=35) *T. claudiae* (MT988332, MT988333)

35°25'55.9"N 136°47'31.0"E *P. tonominea* species complex Kinka *R. naylae* (MT988364, MT988365)

(N=43) *T. claudiae* (MT988330, MT988331)

3. Hyakunen Park, Seki city *P. tonominea* species complex Hyaku *R. naylae* (MT988361, MT988362, MT988363)

Gifu Prefecture (N=22) *T. claudiae* (MT988327, MT988328, MT988329)

35°28'32.2"N 136°52'27.8"E

4. Embara, Yamagata city *P. tonominea* species complex Embara *R. naylae* (MT988368, MT988369, MT988370)

Gifu Prefecture (N=20) *T. claudiae* (MT988334, MT988335, MT988336)

35°39'42.1"N 136°44'02.0"E *Cephalobellus* sp. 1(MT988351-MT988353)

*P. longa* Embara *R. naylae* (MT988371)

(N=7) *T. claudiae* (MT988337 MT988338)

5. Mt. Shimono, Yamaga city *R. cornuta* Yamaga Rhigonematoideasp. 1(MT988372, MT988373)

Kumamoto Prefecture (N=31) *T. claudiae* (MT988339, MT988340, MT988341)

32°56'27.6"N 130°38'58.4"E Thelastomatidae sp. 1(MT988313, MT98314)

6. Miyanoura, Kagoshima city *R. anachoreta* MiyaRhigonematoideasp. 1(MT988374)

Kagoshima Prefecture (N=20) *T. claudiae* (MT988342, MT988343, MT988344)

31°26'00.4"N 130°28'05.0"E Thelastomatidae sp. 2(MT988315)

*R. semicircularis semicircularis* Miya Rhigonematoideasp. 1(MT988375, MT988376)

 (N=9) *T. claudiae* (MT988345, MT988346, MT988347)

 Thelastomatidae sp. 2(MT988316, MT98317, MT98318)

7. Shiroyama, Kagoshima city *R. semicircularis semicircularis* ShiroyamaRhigonematoideasp. 1(MT988377, MT988378)

Kagoshima Prefecture (N=38) *T. claudiae* (MT988348, MT988349, MT988350)

31°35'54.0"N 130°33'00.1"E Thelastomatidae sp.2(MT988319, MT988320)

Table 2 Population of the two parasitic nematodes in the two *Parafontaria* millipedes

|  |  |
| --- | --- |
| Host | Parasitic nematodes |
|  | Male intensities1and prevalences2 | Female intensities1and prevalences2 | Juvenile intensities1and prevalences2 | Total prevanences2 | Co-infection prevalence |
| *Parafontaria laminata* CU(N=113) | *R. naylae* | 3.38 (2.31-4.38) | 3.43 (1.93-6.07) | 7.16 (5.00-9.76) | 31.0 %N=35 | 10.6 %N=12 |
| 11.5 % (N=13) | 12.4 % (N=14) | 22.1 % (N=25) |
| *T. claudiae* | 1.5\* | 1.75 (1.00-2.55) | 8.13 (5.48-12.45) | 27.4 %N=31 |
| 1.8 % (N=2) | 3.5 % (N=4) | 27.4 % (N=31) |
| *Parafontaria tonominea*species complex CU(N=82) | *R. naylae* | 10.99 (9.55-12.7) | 11.47 (9.86-13.07) | 24.03 (18.61-33.57) | 96 %N=79 | 72 %N=59 |
| 89 % (N=73) | 90 % (N=74) | 92 % (N=75) |
| *T. claudiae* | 1.90 (1.40-2.60) | 5.93 (4.77-7.32) | 4.53 (2.47-8.05) | 72 %N=59 |
| 24 % (N=20) | 68 % (N=56) | 23 % (N=19) |

1 Mean intensities and confidence intervals with 95% confidence limit (in brackets) were calculated by Bootstrap Confidence interval method.

2 % of the infected millipede among all millipede examined.

\* Confidence intervals were not calculated if sample size was too small.