

**APPENDIX 1**

**Suppl. table 1.** Measurements (in mm) of apterous viviparous females of *Knautia* feeding *Aphis* species.

\*measurements of ANT III for specimens with 5-segmented antennae; \*\*measurements of ANT III for specimens with 6-segmented antennae.

Character	<i>Aphis confusa</i>	<i>Aphis holmani</i> sp. nov.	<i>Aphis longini</i>	<i>Aphis thomasi</i>
<b>BL</b>	1.75–2.07	1.50–2.00	2.00–2.10	1.20–1.55
<b>MAX W</b>	0.87–1.32	0.85–1.25	1.25–1.32	0.71–0.92
<b>HW</b>	0.36–0.45	0.38–0.44	0.48–0.49	0.35–0.38
<b>ANT</b>	0.94–1.21	0.85–1.20	1.35–1.41	0.59–0.78
<b>ANT III</b>	0.22–0.32	0.29–0.38*	0.17	0.13–0.15*
		0.24–0.33**		0.13–0.19**
<b>ANT IV</b>	0.14–0.19	0.13–0.19	0.19–0.21	0.06–0.10
<b>ANT V</b>	0.14–0.18	0.14–0.19	0.16–0.19	0.09–0.11
<b>ANT VI</b>	0.32–0.39	0.30–0.37	0.55–0.58	0.22–0.31
<b>BASE</b>	0.08–0.11	0.10–0.13	0.11–0.12	0.070–0.080
<b>PT</b>	0.24–0.28	0.20–0.24	0.43–0.47	0.15–0.24
<b>URS</b>	0.10–0.12	0.13–0.16	0.15–0.16	0.105–0.125
<b>III FEMUR</b>	0.37–0.50	0.35–0.49	0.48–0.50	0.23–0.34
<b>III FEMUR LS</b>	0.030–0.035	0.045–0.050	0.050–0.055	0.010–0.011
<b>PHT</b>	0.035–0.050	0.050–0.055	0.050	0.010–0.012
<b>III TIBIA</b>	0.69–0.93	0.64–0.94	0.92–0.95	0.44–0.60
<b>HT II</b>	0.09–0.12	0.085–0.100	0.13–0.14	0.075–0.095
<b>SIPH</b>	0.24–0.38	0.18–0.27	0.20–0.22	0.20–0.24
<b>CAUDA</b>	0.15–0.21	0.15–0.18	0.18–0.18	0.13–0.15
<b>GPL</b>	0.10–0.13	0.11–0.12	0.14–0.16	0.090–0.100
<b>GPW</b>	0.20–0.26	0.22–0.43	0.27–0.29	0.19–0.20

**Suppl. table 2.** Measurements (in mm) of known alate viviparous females of *Knautia* feeding *Aphis* species.

<b>Character</b>	<i>Aphis confusa</i>	<i>Aphis holmani</i> sp. nov.	<i>Aphis thomasi</i>
<b>BL</b>	1.55–1.70	1.20–1.57	1.42–1.50
<b>MAX W</b>	0.72–0.80	0.50–0.66	0.50–0.60
<b>HW</b>	0.36–0.37	0.30–0.34	0.33–0.35
<b>ANT</b>	1.015–1.055	0.920–1.035	0.92–0.94
<b>ANT III</b>	0.22–0.26	0.21–0.26	0.22–0.23
<b>ANT IV</b>	0.15–0.18	0.13–0.15	0.13
<b>ANT V</b>	0.15–0.17	0.14–0.15	0.13–0.15
<b>ANT VI</b>	0.34–0.39	0.34–0.36	0.33
<b>BASE</b>	0.10–0.11	0.100–0.105	0.095–0.100
<b>PT</b>	0.24–0.29	0.24–0.26	0.23–0.24
<b>URS</b>	0.10–0.11	0.125–0.135	0.105–0.110
<b>III FEMUR</b>	0.38–0.42	0.34–0.40	0.31–0.32
<b>III FEMUR LS</b>	0.022–0.025	0.032–0.035	0.010–0.012
<b>PHT</b>	0.015–0.030	0.032–0.037	0.011–0.012
<b>III TIBIA</b>	0.75–0.81	0.72–0.80	0.61–0.65
<b>HT II</b>	0.085–0.100	0.080–0.090	0.085–0.090
<b>SIPH</b>	0.21–0.23	0.12–0.15	0.12–0.17
<b>CAUDA</b>	0.13–0.15	0.10–0.11	0.105–0.110
<b>GP L</b>	0.09–0.10	0.08–0.10	0.08–0.10
<b>GP W</b>	0.18–0.20	0.18–0.22	0.18–0.20

Suppl. table 3. Measurements (in mm) of available for examination oviparous females of *Knautia* feeding *Aphis* species.

<b>Character</b>	<i>Aphis confusa</i>	<i>Aphis holmani</i> sp. nov.	<i>Aphis thomasi</i>
<b>BL</b>	1.45–1.52	1.45–1.60	1.25–1.52
<b>MAX W</b>	0.70–0.79	0.80–0.92	0.60–1.02
<b>HW</b>	0.33–0.37	0.36–0.38	0.30–0.38
<b>ANT</b>	0.70–0.73	0.77–0.85	0.57–0.68
<b>ANT III</b>	0.12–0.14	0.13–0.16	0.10–0.12
<b>ANT IV</b>	0.09–0.10	0.11–0.13	0.06–0.09
<b>ANT V</b>	0.11–0.12	0.12–0.14	0.08–0.09
<b>ANT VI</b>	0.28	0.29–0.32	0.23–0.28
<b>BASE</b>	0.08	0.08	0.075–0.085
<b>PT</b>	0.20	0.21–0.24	0.16–0.20
<b>URS</b>	0.09–0.10	0.11	0.10–0.11
<b>III FEMUR</b>	0.26–0.30	0.29–0.32	0.20–0.26
<b>III FEMUR LS</b>	0.025–0.035	0.04–0.05	0.007–0.010
<b>PHT</b>	0.027–0.045	0.037–0.050	0.007–0.010
<b>III TIBIA</b>	0.46–0.51	0.54–0.60	0.38–0.46
<b>HT II</b>	0.075–0.080	0.08–0.09	0.075–0.08
<b>SIPH</b>	0.16–0.18	0.13–0.14	0.12–0.16
<b>CAUDA</b>	0.13–0.14	0.12–0.13	0.11–0.13
<b>GPL</b>	0.10–0.11	0.10–0.12	0.12–0.13
<b>GP W</b>	0.23–0.25	0.24–0.28	0.20–0.25

**Suppl. table 4.** Measurements (in mm) of available for examination males of *Knautia* feeding *Aphis* species (male of *A. thomasi* with 5-segmented antennae).

<b>Character</b>	<i>Aphis confusa</i>	<i>Aphis holmani</i> sp. nov.	<i>Aphis thomasi</i>
<b>BL</b>	1.00–1.05	0.80–1.07	0.97
<b>MAX W</b>	0.46–0.57	0.43–0.55	0.46
<b>HW</b>	0.31–0.33	0.27–0.34	0.29
<b>ANT</b>	0.76–0.84	0.85–0.93	0.55–0.58
<b>ANT III</b>	0.17	0.17–0.18	0.155–0.165
<b>ANT IV</b>	0.10–0.12	0.14–0.16	0.08
<b>ANT V</b>	0.13–0.14	0.14–0.15	–
<b>ANT VI</b>	0.28–0.31	0.30–0.33	0.23–0.24
<b>BASE</b>	0.07–0.08	0.07–0.08	0.06–0.07
<b>PT</b>	0.20–0.22	0.23–0.25	0.16–0.17
<b>URS</b>	0.085	0.09–0.10	0.10
<b>III FEMUR</b>	0.23–0.25	0.26–0.27	0.21
<b>III FEMUR LS</b>	0.025–0.032	0.032–0.040	0.0075
<b>PHT</b>	0.040–0.045	0.032–0.037	0.01
<b>III TIBIA</b>	0.45–0.50	0.52–0.56	0.39
<b>HT II</b>	0.065–0.070	0.070–0.075	0.07
<b>SIPH</b>	0.10–0.11	0.08–0.09	0.10–0.11
<b>CAUDA</b>	0.09–0.10	0.09–0.10	0.10