

Table 1 The mean and standard deviation of the muscle architecture parameters of the proximal hind limb muscles of the males and females of *Georychus capensis*. Bold text indicates significant difference between sexes $p < .05$

Muscle	Muscle mass (M_M , g)		Belly length (L_M , mm)		Fascicle length (L_f , mm)		Physiological cross sectional area (PCSA, mm^2)		Angle of pennation (θ , °)		F_{MAX} (N/ mm^2)		L_f/L_M	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Iliacus	0.24± 0.08	0.22± 0.09	19.38± 2.32	15.34± 4.86	14.80± 2.65	10.59± 2.52	15.09± 2.60	14.55± 2.68	5.85± 4.78	6.12± 7.18	4.53± 0.78	4.36± 0.80	0.76± 0.04	0.56± 0.08
Psoas major	0.23± 0.13	0.19± 0.04	21.77± 3.84	15.49± 4.61	10.01± 2.19	8.33± 5.96	16.36± 11.84	16.59± 8.69	14.31± 3.78	9.11± 4.15	4.91± 3.55	4.98± 2.61	0.66± 0.17	0.43± 0.19
Pectineus	0.05± 0.02	0.07± 0.03	14.17± 1.27	12.17± 2.86	10.10± 1.89	8.17± 1.69	4.83± 2.46	6.75± 2.67	11.81± 8.94	2.60± 3.76	1.45± 0.74	2.02± 1.45	0.71± 0.09	0.54± 0.10
Vastus lateralis	0.32± 0.18	0.33± 0.05	29.24± 5.11	27.34± 3.91	17.67± 3.69	13.76± 2.01	17.99± 13.11	14.42± 1.05	17.15± 5.66	12.18± 3.32	5.4± 3.92	5.23± 0.32	0.61± 0.8	0.51± 0.17
Vastus medialis	0.22± 0.13	0.21± 0.09	23.99± 3.81	19.18± 1.59	15.16± 1.36	11.99± 2.20	13.31± 7.33	12.61± 3.82	13.92± 4.10	10.62± 3.32	3.99± 2.20	3.78± 1.15	0.64± 0.12	0.50± 0.11
Vastus intermedius	0.13± 0.05	0.23± 0.10	25.63± 3.22	21.31± 2.05	16.57± 1.01	14.68± 1.01	7.41± 3.07	11.67± 5.46	10.24± 2.43	11.31± 5.38	3.50± 1.64	2.22± 0.92	0.66± 0.10	0.55± 0.08
Rectus femoris	0.71± 0.33	0.73± 0.39	28.15± 2.58	22.57± 2.45	19.60± 1.86	14.49± 2.39	33.14± 17.14	34.27± 9.03	17.92± 4.27	14.77± 9.93	10.94± 5.66	11.31± 2.98	0.70± 0.04	0.51± 0.06
Gluteus superficialis	0.49± 0.25	0.54± 0.29	19.52± 3.16	16.63± 5.65	17.88± 3.51	14.97± 4.24	14.32± 3.81	14.61± 3.40	53.94± 5.95	44.65± 7.45	4.30± 1.14	4.38± 1.02	0.92± 0.07	0.73± 0.08
Gluteus medius	0.23± 0.03*	0.37± 0.19*	17.43± 2.27	16.16± 0.97	11.88± 2.24	9.61± 1.39	17.84± 4.11	28.86± 16.73	16.10± 5.43	12.63± 1.75	5.35± 1.23	8.66± 5.02	0.68± 0.11	0.80± 0.19
Gluteus profundus	0.09± 0.01	0.07± 0.08	11.74± 2.02	14.18± 2.32	8.41± 1.43	6.20± 0.27	9.38± 0.62	7.98± 8.27	15.90± 2.63	13.08± 1.44	2.82± 0.19	2.40± 2.48	0.60± 0.08	0.40± 0.08
Piriformis	0.30± 0.13	0.30± 0.09	19.34± 1.63	16.36± 0.50	9.49± 1.35	7.98± 0.63	0.60± 0.32	0.65± 0.14	22.03± 10.83	19.81± 4.30	6.51± 4.14	7.68± 1.64	0.50± 0.11	0.39± 0.03
Semitendinosus	0.35± 0.09	0.50± 0.30	26.34± 2.91	21.36± 4.88	26.28± 2.83	20.81± 4.72	12.68± 2.07	17.82± 8.09	0.00	0.00	3.80± 0.62	5.35± 2.43	0.99± 0.02	0.78± 0.05
Biceps femoris cranial head	0.44± 0.15	0.46± 0.15	31.81± 3.19	27.99± 4.10	29.99± 0.83	23.27± 4.77	13.88± 5.05	15.34± 5.26	0.00	0.00	4.16± 1.52	4.60± 1.58	0.95± 0.07	0.68± 0.19
Biceps femoris caudal head	0.27± 0.08	0.36± 0.28	22.20± 3.91	22.35± 4.66	19.40± 2.79	18.97± 4.29	13.13± 3.23	13.74± 7.29	0.00	0.00	3.94± 0.97	4.12± 2.19	0.88± 0.08	0.68± 0.03
Semimembranosus	0.66± 0.23	0.57± 0.16	29.28± 4.57	27.91± 4.85	26.60± 4.67	25.77± 4.68	24.48± 12.04	16.89± 5.51	0.00	0.00	7.34± 3.61	5.07± 1.65	0.91± 0.03	0.74± 0.06
Gluteofemoralis	0.30± 0.10	0.32± 0.10	26.45± 3.93	24.29± 4.05	23.42± 4.54	22.17± 3.06	13.00± 6.65	10.95± 2.27	0.00	0.00	3.90± 2.00	3.28± 0.68	0.88± 0.07	0.73± 0.03
Adductor brevis	0.31± 0.10	0.38± 0.18	29.41± 6.18	25.75± 5.34	23.83± 5.22	27.28± 3.87	10.48± 3.08	11.85± 2.62	0.00	0.00	3.14± 0.92	3.56± 0.79	0.94± 0.07	0.74± 0.02
Gracilis anticus	0.49± 0.10	0.47± 0.31	25.57± 5.09	20.31± 3.50	24.62± 5.47	19.39± 3.70	19.58± 5.77	17.77± 7.79	0.00	0.00	5.87± 1.73	5.33± 2.34	0.96± 0.08	0.76± 0.02
Adductor longus	0.12± 0.09	0.10± 0.05	19.50± 4.90	14.56± 1.53	12.83± 3.90	11.85± 2.05	8.47± 5.20	6.03± 2.17	0.00	0.79± 1.98	2.54± 1.56	1.81± 0.65	0.68± 0.23	0.65± 0.05
Adductor magnus	0.22± 0.08	0.29± 0.12	23.55± 4.49	18.76± 1.42	18.97± 4.63	15.35± 1.02	11.50± 5.26	14.38± 6.46	3.48± 4.19	0.00	3.45± 1.58	4.32± 1.94	0.81± 0.15	0.66± 0.03

Table 2 The mean and standard deviation of the muscle architecture parameters of the distal hind limb muscles of the males and females of *Georychus capensis*. Bold text indicates significant difference between sexes $p < .05$

Muscle	Muscle mass (M _M , g)		Belly length (L _M , mm)		Fascicle length (L _f , mm)		Physiological cross sectional area (PCSA, mm ²)		Angle of pennation (θ, °)		F _{MAX} (N/mm ⁻²)		L _f /L _M	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Tibialis cranialis	0.14± 0.06	0.15± 0.03	17.01± 1.88	12.57± 1.66	13.65± 1.17	10.54± 2.04	9.66± 5.10	10.43± 3.71	15.36± 3.56	13.63± 2.84	2.90± 1.53	3.13± 1.11	0.811± 0.11	0.67± 0.08
Extensor digitorum longus	0.05± 0.03	0.06± 0.03	17.12± 2.22	14.65± 1.57	12.87± 3.39	12.95± 0.92	4.03± 3.21	3.30± 1.29	11.41± 6.12	7.47± 2.79	1.21± 0.96	0.99± 0.39	0.76± 0.20	0.71± 0.08
Extensor hallucis longus	0.05± 0.01	0.05± 0.02	13.68± 1.71	10.66± 1.21	11.37± 2.14	8.17± 0.81	3.96± 1.20	4.07± 1.66	17.46± 10.57	12.70± 3.37	1.19± 0.36	1.22± 0.50	0.83± 0.07	0.62± 0.07
Gastrocnemius medial head	0.18± 0.05	0.19± 0.09	16.48± 0.90	11.45± 0.56	13.70± 2.24	9.17± 2.40	12.52± 4.74	16.27± 10.82	12.24± 2.33	9.44± 2.29	3.76± 1.42	4.88± 3.24	0.83± 0.10	0.64± 0.14
Gastrocnemius lateral head	0.21± 0.04	0.20± 0.08	17.63± 2.28	12.91± 1.16	12.39± 0.56	11.02± 1.75	15.72± 3.82	12.73± 4.38	13.48± 6.22	16.68± 6.70	4.72± 1.15	3.82± 1.31	0.71± 0.06	0.69± 0.12
Soleus	0.02± 0.02	0.03± 0.02	13.46± 1.99	8.30± 2.31	12.24± 2.21	6.86± 2.89	1.74± 1.51	2.97± 2.89	19.75± 9.88	15.81± 5.32	0.52± 0.45	0.89± 0.87	0.91± 0.10	0.65± 0.15
Plantaris	0.10± 0.05	0.09± 0.04	16.09± 2.63	11.85± 0.72	11.46± 0.87	10.86± 0.96	8.07± 4.19	6.15± 2.88	15.98± 4.84	13.96± 5.41	2.42± 1.26	1.85± 0.86	0.72± 0.11	0.74± 0.10
Flexor hallucis longus	0.03± 0.01	0.03± 0.01	13.47± 1.33	10.72± 0.91	8.55± 3.80	6.66± 4.08	4.60± 3.64	4.49± 3.18	13.94± 2.53	14.91± 3.86	1.38± 1.09	1.35± 0.96	0.62± 0.23	0.50± 0.30
Tibialis caudalis	0.07± 0.01	0.06± 0.04	14.67± 1.82	11.12± 2.06	8.68± 3.60	7.85± 1.26	8.08± 5.74	5.36± 3.23	14.04± 4.17	9.06± 3.91	2.43± 1.72	1.61± 0.97	0.66± 0.27	0.63± 0.11
Peroneus longus	0.04± 0.01	0.03± 0.01	14.73± 0.99	9.77± 0.76	10.84± 3.29	7.46± 3.46	4.13± 2.03	3.19± 1.63	11.23± 1.78	11.62± 3.57	1.24± 0.61	0.96± 0.49	0.73± 0.20	0.60± 0.25
Peroneus brevis	0.04± 0.02	0.04± 0.02	13.12± 1.66	9.03± 0.75	8.38± 2.72	6.26± 1.54	5.11± 2.93	5.09± 2.65	13.24± 4.80	9.79± 2.79	1.53± 0.88	1.53± 0.79	0.65± 0.22	0.53± 0.18

Table 3 The mean and standard deviation of the muscle architecture parameters of the proximal hind limb muscles of the males and females of *Bathyrgeus suillus*. Bold text indicates significant difference between sexes $p < .05$

Muscle	Muscle mass (Mm, g)		Belly length (L _M , mm)		Fascicle length (L _f , mm)		Physiological cross sectional area (PCSA, mm ²)		Angle of pennation (θ, °)		F _{MAX} (N/mm ²)		L _f /L _M	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Iliacus	1.76± 0.17	0.76± 0.58	36.49± 2.37	21.52± 4.86	24.36± 4.61	14.03± 2.79	68.60± 8.21	36.11± 21.65	8.80± 3.73	10.05± 7.22	20.58± 2.46	10.83± 6.49	0.66± 0.09	0.49± 0.04
Psoas major	1.50± 0.38	0.71± 0.66	45.84± 11.36	27.41± 5.48	22.81± 5.84	13.85± 4.22	63.66± 18.79	36.63± 38.88	9.12± 4.35	13.78± 12.42	19.10± 5.64	10.99± 11.66	0.50± 0.09	0.39± 0.17
Pectineus	0.42± 0.13	0.25± 0.17	21.85± 2.07	17.41± 2.38	15.18± 11.23	11.23± 2.69	27.40± 14.39	16.67± 12.78	8.30± 4.99	4.70± 6.50	8.22± 4.32	5.00± 3.83	0.70± 0.17	0.53± 0.17
Vastus lateralis	2.24± 0.53	1.33± 0.43	48.94± 6.87	37.49± 1.45	26.73± 3.16	26.77± 4.00	75.03± 11.67	37.53± 17.47	17.16± 6.57	11.54± 1.53	22.51± 3.50	11.26± 5.24	0.61± 0.038	0.51± 0.09
Vastus medialis	1.46± 0.40	0.75± 0.27	41.72± 3.05	34.37± 4.54	24.16± 7.99	19.48± 4.94	59.27± 22.83	28.77± 10.56	13.50± 5.44	9.90± 6.23	17.78± 6.85	8.63± 3.17	0.57± 0.15	0.46± 0.14
Vastus intermedius	0.90± 0.27	0.83± 0.46	34.10± 9.12	34.75± 5.32	26.08± 7.73	22.05± 5.41	32.58± 13.86	26.60± 9.16	20.20± 8.29	12.48± 7.03	9.78± 4.16	7.98± 2.75	0.77± 0.08	0.51± 0.10
Rectus femoris	5.62± 1.50	3.60± 0.61	45.17± 5.00	36.83± 3.22	29.77± 4.68	26.29± 4.80	171.08± 44.12	99.79± 29.09	17.46± 5.47	15.15± 5.45	56.46± 14.56	32.93± 9.60	0.66± 0.09	0.57± 0.12
Gluteus superficialis	4.09± 0.77	2.46± 0.73	36.98± 8366	27.00± 3.84	34.05± 3.70	25.28± 4.80	63.88± 47.58	27.31± 4.08	56.69± 25.71	53.22± 9.87	19.16± 14.27	8.19± 1.22	0.94± 0.12	0.75± 0.04
Gluteus medius	1.97± 0.42	1.04± 0.20	35.61± 4.18	24.66± 2.29	26.41± 8.10	17.89± 6.05	74.20± 33.41	44.96± 17.67	14.89± 4.41	13.38± 5.50	22.26± 10.02	13.49± 5.30	0.75± 0.23	0.57± 0.16
Gluteus profundus	0.48± 0.31	0.46± 0.24	27.46± 1.62	22.63± 3.39	15.25± 1.90	11.94± 3.00	29.58± 21.14	27.99± 14.09	12.58± 2.84	13.47± 6.47	8.87± 6.34	8.40± 4.23	0.56± 0.09	0.40± 0.09
Piriformis	1.29± 0.18	0.81± 0.54	34.32± 4.36	24.60± 7.35	23.35± 2.81	14.98± 6.99	49.79± 7.47	38.88± 23.81	18.65± 2.95	13.73± 7.64	14.94± 2.24	11.67± 7.14	0.69± 0.11	0.48± 0.13
Semitendinosus	2.67± 0.51	1.38± 0.43	58.04± 4.24	37.28± 8.68	54.63± 6.59	34.90± 10.41	47.24± 12.44	30.12± 4.44	0.00 0.00	0.00 0.00	14.17± 3.73	9.04± 1.33	0.94± 0.07	0.74± 0.07
Biceps femoris cranial head	3.61± 0.54	2.48± 1.04	55.75± 1.83	45.98± 3.74	52.95± 3.81	42.06± 9.85	64.71± 9.21	44.99± 20.30	0.00 0.00	0.00 0.00	19.41± 2.76	13.50± 6.09	0.95± 0.06	0.73± 0.11
Biceps femoris caudal head	1.85± 0.26	1.12± 0.27	36.21± 4.15	29.22± 4.77	30.76± 3.14	24.61± 5.89	57.35± 9.41	35.70± 15.68	0.00 0.00	0.00 0.00	17.21± 2.82	10.71± 4.70	0.85± 0.05	0.67± 0.10
Semimembranosus	4.84± 0.72	2.99± 0.85	54.36± 3.65	42.74± 6.53	57.47± 2.54	40.75± 6.65	79.89± 12.34	55.23± 8.56	0.00 0.00	0.00 0.00	23.97± 3.70	16.57± 2.57	1.06± 0.05	0.76± 0.02
Gluteofemoralis	2.02± 0.53	1.04± 0.59	49.07± 2.47	37.62± 4.09	49.02± 3.72	35.31± 5.81	39.30± 11.21	22.40± 11.98	0.00 0.00	0.00 0.00	11.79± 3.36	6.72± 3.59	1.00± 0.03	0.75± 0.06
Adductor brevis	3.01± 0.31	1.99± 1.00	44.70± 7.69	39.71± 3.82	42.73± 10.29	34.01± 8.18	69.11± 17.70	45.94± 25.74	0.00 0.00	0.00 0.00	20.73± 5.31	13.78± 7.72	0.95± 0.07	0.68± 0.11
Gracilis anticus	3.53± 0.84	2.28± 0.73	39.40± 4.61	29.52± 3.62	38.58± 4.92	26.78± 3.24	88.65± 27.12	64.28± 19.35	0.00 0.00	0.00 0.00	26.60± 8.14	19.28± 5.80	0.98± 0.02	0.73± 0.04
Adductor longus	0.51± 0.20	0.20± 0.09	27.68± 4.84	20.78± 1.78	20.715± 3.62	16.85± 2.04	22.50± 5.46	9.09± 3.71	1.43± 2.86	0.00 0.00	6.75± 1.64	2.73± 1.11	0.75± 0.05	0.65± 0.09
Adductor magnus	2.03± 0.43	1.28± 0.56	34.24± 2.61	30.47± 6.07	28.91± 2.57	22.05± 8.18	66.54± 13.79	45.40± 19.27	1.95± 1.63	0.31± 0.77	19.96± 4.14	13.62± 5.78	0.84± 0.02	0.58± 0.14

Table 4 The mean and standard deviation of the muscle architecture parameters of the distal hind limb muscles of the males and females of *Bathyergus suillus*. Bold text indicates significant difference between sexes $p < .05$

Muscle	Muscle mass (M _M , g)		Belly length (L _M , mm)		Fascicle length (L _f , mm)		Physiological cross sectional area (PCSA, mm ²)		Angle of pennation (θ, °)		F _{MAX} (N/mm ⁻²)		L _f /L _M	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Tibialis cranialis	0.94± 0.16	0.64± 0.25	28.21± 2.19	21.95± 3.58	25.29± 0.59	19.18± 5.13	33.41± 5.24	23.82± 8.64	17.10± 5.32	14.19± 6.41	10.02± 1.57	7.15± 2.59	0.90± 0.05	0.70± 0.11
Extensor digitorum longus	0.39± 0.03	0.30± 0.10	34.68± 3.10	26.85± 3.90	26.90± 3.63	20.38± 5.94	13.81± 1.97	10.86± 3.01	9.85± 0.73	13.01± 6.82	4.14± 0.59	3.26± 0.91	0.76± 0.20	0.60± 0.10
Extensor hallucis longus	0.30± 0.08	0.19± 0.06	25.08± 2.24	19.04± 2.43	20.44± 1.93	15.50± 6.18	13.79± 5.23	8.97± 2.66	13.59± 7.50	14.29± 8.01	4.14± 1.57	2.69± 0.80	0.82± 0.11	0.64± 0.20
Gastrocnemius medial head	1.34± 0.31	0.87± 0.24	29.87± 5.31	20.34± 3.09	25.44± 2.19	16.37± 3.80	48.29± 7.68	39.59± 7.32	13.31± 2.24	8.03± 4.37	14.49± 2.30	11.88± 2.19	0.86± 0.09	0.65± 0.19
Gastrocnemius lateral head	1.11± 0.16	0.63± 0.32	28.14± 5.21	21.02± 2.96	22.15± 3.79	17.81± 0.62	46.53± 2.47	25.97± 14.13	12.84± 1.68	12.46± 4.37	13.96± 0.74	7.79± 4.24	0.79± 0.06	0.76± 0.23
Soleus	0.328± 0.18	0.22± 0.09	22.14± 5.10	17.70± 4.39	17.61± 6.05	13.34± 4.22	16.48± 4.45	12.05± 4.29	11.90± 1.55	12.44± 2.03	4.94± 1.34	3.61± 1.29	0.78± 0.09	0.60± 0.07
Plantaris	0.62± 0.10	0.37± 0.12	28.87± 4.93	20.72± 5.72	26.24± 4.53	16.30± 60.32	21.18± 1.82	15.85± 6.38	18.50± 6.06	10.07± 4.96	6.35± 0.55	4.76± 1.91	0.91± 0.07	0.69± 0.10
Flexor hallucis longus	0.17± 0.04	0.22± 0.16	20.85± 3.21	17.89± 3.42	14.58± 6.35	12.71± 7.10	13.33± 8.31	13.43± 7.30	13.30± 3.80	16.23± 8.83	4.00± 2.42	2.03± 2.19	0.70± 0.27	0.55± 0.26
Tibialis caudalis	0.26± 0.04	0.19± 0.09	22.37± 5.07	17.80± 1.75	14.01± 2.06	10.46± 2.58	16.89± 2.66	13.57± 7.63	14.97± 4.07	10.30± 4.95	5.07± 0.80	4.07± 2.29	0.65± 0.15	0.47± 0.07
Peroneus longus	0.33± 0.18	0.18± 0.14	24.32± 3.18	17.04± 1.53	17.10± 2.57	12.57± 2.78	17.80± 8.37	11.20± 9.13	11.10± 0.95	7.55± 2.88	5.34± 2.51	3.36± 2.74	0.70± 0.05	0.59± 0.10
Peroneus brevis	0.27± 0.13	0.17± 0.12	21.43± 3.10	17.17± 4.85	16.62± 2.00	13.02± 1.71	15.11± 7.30	9.66± 6.54	12.69± 4.11	11.53± 6.21	4.53± 2.19	2.90± 1.96	0.78± 0.09	0.62± 0.12

Table 5 The mean and standard deviation of the muscle architecture parameters of the proximal hind limb muscles of the males and females of *Cryptomys hottentotus natalensis*. Bold text indicates significant difference between sexes $p < .05$

Muscle	Muscle mass (M _m , g)		Belly length (L _M , mm)		Fascicle length (L _f , mm)		Physiological cross sectional area (PCSA, mm ²)		Angle of pennation (θ, °)		F _{MAX} (N/mm ²)		L _f /L _M	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Iliacus	0.09± 0.04	0.10± 0.02	13.74± 2.37	13.96± 2.77	11.73± 4.61	9.67± 1.86	7.30± 3.39	9.92± 3.88	11.78± 4.07	11.78± 7.97	2.19± 1.02	2.98± 1.16	0.86± 0.40	0.69± 0.14
Psoas major	0.23± 0.13	0.19± 0.01	20.89± 10.73	15.55± 1.38	11.83± 5.40	10.72± 0.77	11.88± 10.89	3.98± 0.62	11.75± 6.05	19.77± 6.59	3.57± 3.27	1.19± 0.19	0.61± 0.34	0.69± 0.01
Pectineus	0.06± 0.03	0.05± 0.03	11.50± 5.87	13.01± 4.11	9.43± 4.80	11.81± 3.99	5.69± 3.40	4.38± 3.34	2.28± 2.50	2.52± 2.48	1.71± 1.02	1.32± 1.01	0.83± 0.42	0.91± 0.08
Vastus lateralis	0.14± 0.07	0.12± 0.05	21.23± 9.60	20.06± 1.85	15.93± 739	16.17± 3.01	7.99± 4.26	6.94± 3.09	12.07± 6.66	14.73± 3.87	2.40± 1.28	2.08± 0.93	0.75± 0.35	0.81± 0.12
Vastus medialis	0.08± 0.05	0.06± 0.02	20.74± 9.38	17.11± 3.38	15.91± 7.23	13.08± 1.28	4.72± 3.27	4.36± 1.33	16.43± 8.96	11.00± 2.30	1.42± 0.98	1.31± 0.40	0.77± 0.35	0.78± 0.11
Vastus intermedius	0.09± 0.05	0.06± 0.04	15.75± 7.39	14.09± 0.00	14.56± 6.62	11.95± 1.46	5.96± 3.15	4.40± 2.96	14.80± 7.29	12.73± 3.38	1.79± 0.95	1.32± 0.89	0.93± 0.43	0.85± 0.10
Rectus femoris	0.38± 0.20	0.26± 0.05	19.88± 8.94	18.38± 2.38	14.82± 6.82	13.49± 0.32	23.46± 12.57	17.07± 4.03	18.51± 9.59	18.29± 4.93	7.74± 4.15	5.63± 1.33	0.75± 0.35	0.74± 0.10
Gluteus superficialis	0.20± 0.10	0.12± 0.02	15.28± 6.85	12.98± 1.52	15.41± 7.02	12.95± 1.68	8.18± 3.85	5.34± 0.77	45.89± 21.58	50.34± 11.58	2.46± 1.15	1.60± 0.23	1.01± 0.46	1.00± 0.09
Gluteus medius	0.14± 0.07	0.10± 0.04	15.71± 7.21	14.32± 0.72	11.73± 5.50	11.54± 1.22	10.86± 5.78	7.38± 3.13	14.62± 8.57	14.22± 3.16	3.26± 1.74	2.21± 0.94	0.76± 0.38	0.81± 0.11
Piriformis	0.11± 0.05	0.08± 0.02	15.97± 7.19	14.40± 1.20	12.65± 6.13	9.76± 2.41	8.40± 4.18	7.54± 2.23	14.34± 7.49	12.95± 7.16	2.52± 1.25	2.26± 0.67	0.79± 0.37	0.68± 0.16
Semitendinosus	0.19± 0.09	0.12± 0.01	21.25± 10.71	19.21± 0.19	19.37± 10.01	20.14± 0.75	9.05± 4.56	5.56± 0.36	0.00 0.00	0.00 0.00	2.72± 1.37	1.67± 0.11	0.91± 0.47	1.05± 0.03
Biceps femoris cranial head	0.21± 0.10	0.15± 0.03	26.40± 11.85	23.56± 1.39	23.22± 1.48	26.81± 12.11	7.48± 3.40	6.09± 0.85	0.00 0.00	0.00 0.00	2.24± 1.02	1.83± 0.25	1.02± 0.046	0.99± 0.09
Biceps femoris caudal head	0.19± 0.09	0.18± 0.07	18.40± 8.25	19.75± 3.54	16.41± 7.46	17.66± 2.13	11.19± 5.73	9.32± 3.21	0.00 0.00	0.00 0.00	2.80± 0.96	3.36± 1.72	0.89± 0.40	0.90± 0.10
Semimembranosus	0.28± 0.15	0.18± 0.02	24.05± 10.82	22.08± 2.13	24.13± 11.11	21.95± 4.25	10.92± 5.99	8.09± 1.98	0.00 0.00	0.00 0.00	3.28± 1.80	2.43± 0.59	1.00± 0.45	0.99± 0.10
Gluteofemoralis	0.10± 0.05	0.09± 0.02	22.85± 11.45	18.68± 1.16	24.05± 12.46	18.40± 2.61	3.97± 2.21	4.65± 1.43	0.00 0.00	0.00 0.00	1.19± 0.66	1.39± 0.43	1.05± 0.53	0.98± 0.08
Adductor brevis	0.14± 0.08	0.15± 0.09	23.35± 10.51	22.77± 3.07	20.90± 9.79	20.88± 4.08	6.16± 3.10	6.36± 2.52	0.00 0.00	0.00 0.00	1.85± 0.93	1.91± 0.76	0.90± 0.42	0.91± 0.10
Gracilis anticus	0.10± 0.05	0.06± 0.01	16.28± 7.56	15.39± 2.06	14.90± 6.74	14.30± 1.33	6.01± 2.92	3.87± 0.69	0.00 0.00	0.00 0.00	1.80± 0.88	1.16± 0.21	0.93± 0.43	0.94± 0.15
Gracilis posticus	0.08± 0.04	0.07± 0.02	15.59± 7.10	15.40± 0.43	15.59± 7.07	14.95± 0.52	4.83± 2.27	4.30± 0.99	0.00 0.00	0.00 0.00	1.45± 0.68	1.29± 0.30	1.00± 0.45	0.97± 0.04
Adductor longus	0.06± 0.03	0.02± 0.01	16.92± 9.10	11.95± 3.04	16.63± 9.18	11.77± 3.03	3.48± 2.00	1.81± 0.61	0.00 0.00	0.00 0.00	1.04± 0.60	0.54± 0.18	0.98± 0.49	0.96± 0.05
Adductor magnus	0.12± 0.06	0.12± 0.06	17.89± 8.26	17.15± 1.69	14.90± 7.08	13.99± 1.34	7.78± 3.50	8.16± 4.80	4.65± 4.58	5.90± 6.36	2.33± 1.05	2.45± 1.44	0.83± 0.38	0.82± 0.13

Table 6 The mean and standard deviation of the muscle architecture parameters of the distal hind limb muscles of the males and females of *Cryptomys hottentotus natalensis*. Bold text indicates significant difference between sexes $p < .05$

Muscle	Muscle mass (M _M , g)		Belly length (L _M , mm)		Fascicle length (L _f , mm)		Physiological cross sectional area (PCSA, mm ²)		Angle of pennation (θ, °)		F _{MAX} (N/mm ²)		L _f /L _M	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Tibialis cranialis	0.09± 0.04	0.07± 0.02	12.14± 5.48	10.79± 0.83	10.67± 4.86	9.19± 0.71	7.86± 3.82	7.00± 1.34	17.80± 8.53	12.64± 7.05	2.36± 1.15	2.10± 0.40	0.88± 0.41	0.85± 0.06
Extensor digitorum longus	0.04± 0.02	0.04± 0.03	13.90± 6.28	13.20± 1.59	11.89± 5.92	11.35± 2.51	3.01± 1.52	3.11± 1.48	11.10± 5.33	11.38± 3.78	0.90± 0.46	0.93± 0.45	0.85± 0.41	0.86± 0.11
Extensor hallucis longus	0.03± 0.01	0.03± 0.02	10.85± 4.98	10.11± 0.83	9.61± 4.48	7.76± 2.25	2.44± 1.21	4.32± 2.58	11.18± 5.59	16.77± 3.44	0.73± 0.36	1.30± 0.77	0.89± 0.41	0.77± 0.22
Gastrocnemius medial head	0.09± 0.04	0.06± 0.01	13.04± 5.31	11.67± 1.16	11.28± 5.21	9.51± 2.45	7.24± 3.44	6.55± 1.45	10.36± 5.04	9.42± 0.40	2.71± 1.03	1.97± 0.43	0.87± 0.39	0.81± 0.17
Gastrocnemius lateral head	0.08± 0.04	0.07± 0.02	12.61± 5.83	12.18± 1.18	10.88± 5.00	11.34± 2.32	6.58± 2.96	5.42± 1.36	20.70± 13.90	10.54± 2.54	1.97± 0.89	1.63± 0.41	0.87± 0.40	0.93± 0.12
Soleus	0.03± 0.01	0.02± 0.01	11.41± 5.30	10.25± 1.22	11.16± 5.26	10.26± 1.67	2.28± 1.42	1.63± 0.89	11.62± 6.18	13.01± 5.52	0.68± 0.43	0.49± 0.27	0.98± 0.44	1.00± 0.05
Plantaris	0.06± 0.03	0.04± 0.01	11.71± 5.45	11.00± 0.96	11.02± 5.12	10.95± 1.35	4.67± 2.34	3.53± 0.82	13.00± 7.07	11.14± 5.30	1.40± 0.70	1.06± 0.25	0.94± 0.42	0.99± 0.06
Flexor hallucis longus	0.02± 0.01	0.02± 0.02	10.48± 4.71	9.97± 0.71	6.81± 3.14	8.57± 1.96	2.68± 1.53	2.53± 1.48	16.90± 9.85	13.18± 3.28	0.80± 0.46	0.76± 0.44	0.65± 0.31	0.86± 0.18
Tibialis caudalis	0.04± 0.02	0.03± 0.02	11.36± 5.84	9.93± 2.04	7.65± 3.86	7.56± 1.04	4.41± 3.32	3.61± 2.92	15.51± 8.54	10.42± 2.63	1.32± 1.00	1.08± 0.88	0.69± 0.36	0.78± 0.14
Peroneus longus	0.03± 0.01	0.02± 0.01	11.21± 5.43	9.73± 1.37	7.14± 3.48	8.18± 2.51	3.93± 2.13	2.45± 1.21	13.94± 7.25	14.27± 2.86	1.18± 0.64	0.73± 0.36	0.68± 0.38	0.83± 0.15
Peroneus brevis	0.03± 0.02	0.03± 0.00	10.35± 5.26	9.00± 0.66	8.25± 4.41	7.95± 0.23	2.86± 1.89	3.32± 0.59	16.54± 9.86	8.76± 0.68	0.86± 0.57	1.00± 0.18	0.80± 0.42	0.89± 0.04