

https://dspace.org/

Morphological variation in the metatarsal bones of selected recent and pre-pastoral humans from South Africa

Zipfel, Bernhard

2006-03-23
http://hdl.handle.net/10539/271

Downloaded from a DSpace repository. https://dspace.org/

Table A5.4: Summary of the Sotho female morphological traits and associated pathological lesions.

	1Head	1Base	1L	2M	2L	3M	3L	4M	4L	5Var	PATHOLOGICAL LESIONS
1	1	2	2	2	9	3	2	3	0	0	None
2	1	1	2	1	4	2	2	3	0	0	5 proximal arthritic changes
3	1	1	2	2	3	2	2	2	0	0	1 & 5 head arthritic changes
4	1	2	2	1	3	1	2	3	0	0	1 inter-tubercle ridge
5	3	1	2	1	8	1	2	3	0	0	1 head lateral hypertrophy
6	2	1	2	1	3	1	2	3	0	0	None
7	2	1	2	2	3	1	2	2	0	0	3 - 5 distal shaft lateral deviation
8	2	2	1	1	3	2	2	3	0	0	Eroded crista
9	1	2	1	1	4	2	2	2	0	0	None
10	3	2	2	1	2	2	2	1	0	0	1 head arthritic changes
11	1	1	2	1	6	4	2	3	0	0	1 head doso- medial hypertrophy
12	1	2	1	1	3	4	2	3	0	0	1 head dorso-lateral hypertrophy. 1 - 3 proximal arthritic change
13	1	1	3	1	2	1	2	1	0	0	1 head dorso- medial hypertrophy
14	1	2	2	1	8	1	2	3	0	0	None
15	1	2	2	1	3	2	2	1	0	0	4, 5 proximal arthritic change
16	1	2	2	1	8	2	2	2	0	0	None
17	2	1	2	1	8	1	2	1	0	0	1 head dorso-medial hypertrophy
18	3	2	2	1	3	1	2	3	0	0	1 head doso- medial hypertrophy
19	1	2	2	1	1	1	1	2	0	0	None
20	3	2	2	2	3	2	2	1	0	0	None
21	3	1	2	1	3	2	1	1	0	0	1 - 3 inter-tubercle ridges
22	1	2	2	1	3	2	2	3	0	0	1 head lateral hypertrophy. 2 - 5 kneeling marker
23	1	1	1	1	3	1	2	3	0	0	2 - 5 kneeling marker
24	1	1	1	1	3	2	2	2	0	0	1 dorsal head exostosis. 1 - 5 kneeling marker
25	1	1	2	1	3	2	2	2	0	0	1 dorso-lateral hypertrophy. 2 - 5 kneeling marker
26	3	2	2	1	1	1	2	1	0	0	1 dorso-lateral hypertrophy.
27	1	1	3	1	3	1	2	3	0	0	1 kneeling marker
28	3	1	2	1	2	2	2	1	0	0	None
29	2	2	2	3	3	2	3	0	0	0	1 - 3 kneeling marker
30	2	1	2	1	4	2	1	1	0	0	1 dorso-medial hyertrophy, dorsal head flattening, irregular cortex

Table A5.5: Summary of the Sotho male morphological traits and associated pathological lesions.

	1Head	1Base	1L	2M	2L	3M	3L	4M	4L	5Var	PATHOLOGICAL LESIONS
1	1	2	2	2	9	3	2	3	0	0	1 head medial hypertrophy
2	1	1	2	1	4	2	2	3	0	0	1 dorsal head flattening
3	1	1	2	2	3	2	2	2	0	0	None
4	1	2	2	1	3	1	2	3	0	0	5 inter-tubercle ridge
5	3	1	2	1	8	1	2	3	0	0	None
6	2	1	2	1	3	1	2	3	0	0	1 dorsal head flattening, proximal arthritic change
7	2	1	2	2	3	1	2	2	0	0	Eroded crista. 5 proximal arthritic change
8	2	2	1	1	3	2	2	3	0	0	4 proximal arthritic change. 5 styloid process exostosis. 4, 5 distal lateral deviation.
9	1	2	1	1	4	2	2	2	0	0	1 dorsal head flattening
10	3	2	2	1	2	2	2	1	0	0	1 head medial hypertrophy
11	1	1	2	1	*6	4	2	3	0	0	1 head lateral hypertrophy. 3 - 5 kneeling marker
12	1	2	1	1	3	4	2	3	0	0	1, 3, 5 kneeling marker
13	1	1	3	1	2	1	2	1	0	0	1 - 5 heads dorsal lipping
14	1	2	2	1	8	1	2	3	0	0	1 kneeling marker
15	1	2	2	1	3	2	2	1	0	0	1 head lateral hypertrophy. 5 distal lateral deviation
16	1	2	2	1	8	2	2	2	0	0	1 head medial hypertrophy
17	2	1	2	1	8	1	2	1	0	0	1 head medial hypertrophy. 3 kneeling marker
18	3	2	2	1	3	1	2	3	0	0	1, 2 proximal arthrtic changes
19	1	2	2	1	1	1	1	2	0	0	1dorso- medial hypertrophy. 2 proximal arthritic change. 2 - 5 kneeling marker
20	3	2	2	2	3	2	2	1	0	0	2 kneeling marker
21	3	1	2	1	3	2	1	1	0	0	1 head dorso- medial hypertrophy
22	1	2	2	1	3	2	2	3	0	0	1 dorsal head flattening. 2, 4 kneeling marker.
23	1	1	1	1	3	1	2	3	0	0	None
24	1	1	1	1	3	2	2	2	0	0	5 irregular cortical lesions
25	1	1	2	1	3	2	2	2	0	0	None
26	3	2	2	1	1	1	2	1	0	0	1 proximal arthritic change
27	1	1	3	1	3	1	2	3	0	0	None
28	3	1	2	1	2	2	2	1	0	0	1 head, dorsal lipping
29	2	2	2	3	3	2	3	0	0	0	1 head, dorsal lipping. 2, 3 shaft callus d/t #
30	2	1	2	1	4	2	1	1	0	0	None

Table A5.6: Summary of the Zulu female morphological traits and associated pathological lesions.

	1Head	1Base	1L	2M	2L	3M	3L	4M	4L	5Var	PATHOLOGICAL LESIONS
1	1	1	2	2	4	2	2	2	0	0	2, 3, 5 proximal arthritic changes
2	1	1	1	2	3	1	2	3	0	0	Styloid process exostosis
3	3	1	2	2	8	1	2	2	0	0	None
4	1	1	2	1	8	1	2	3	0	0	1 head dorsal exostosis. 4 proximal arthritic change
5	1	1	2	2	4	2	2	3	0	0	1 head dorso-lateral hypertrophy
6	1	2	2	2	4	2	2	3	0	0	1 head dorso-medial exostosis. 5 head dorsal exostosis, shaft irregular
7	3	1	1	2	4	2	2	2	0	0	None
8	1	1	1	1	3	1	2	3	0	0	1 head flattening, lipping.1& 2 shaft irregular. 3 & 4 prox. arth. change
9	3	1	2	2	6	1	2	2	0	0	1 head dorso- medial exostosis.
10	3	1	1	1	4	2	2	3	0	0	None
11	1	1	2	1	6	1	2	3	0	0	None
12	1	1	2	1	3	2	2	3	0	0	5 distal shaft lateral deviation
13	1	1	1	1	6	2	1	1	0	0	None
14	3	1	1	1	3	1	2	2	0	0	None
15	1	1	2	1	3	2	2	2	0	0	4 proximal arthritic change
16	3	1	2	1	3	1	2	2	0	0	5 proximal arthritic change
17	2	2	2	1	3	1	2	3	0	0	None
18	3	2	2	1	2	2	2	3	0	0	3 proximal arthritic changes
19	1	1	2	2	8	1	2	1	0	0	None
20	1	1	2	1	4	2	2	3	0	0	None
21	1	2	2	1	1	1	2	3	0	0	None
22	1	1	2	1	3	1	2	3	0	0	5 styloid process hypertrophy
23	3	1	2	1	3	1	1	1	0	0	None
24	2	1	2	1	3	1	2	1	0	0	1 head dorso-medial hypertrophy
25	1	1	1	1	1	1	2	3	0	0	5 distal shaft lateral deviation
26	2	1	2	1	3	1	1	1	0	0	None
27	1	1	2	2	4	2	2	1	0	0	None
28	3	1	2	1	9	2	2	3	0	0	1 head dorso-medial hypertrophy
29	2	2	2	1	2	4	1	1	0	0	5 proxiaml arthritic changes
30	1	1	1	2	8	1	1	3	0	0	None

Table A5.7: Summary of the Zulu male morphological traits and associated pathological lesions.

	1Head	1Base	1L	2M	2L	3M	3L	4M	4L	5Var	PATHOLOGICAL LESIONS
1	1	2	2	1	4	2	2	3	0	0	1 head dorso-medial exostosis. 5 proximal arthritic change
2	2	1	2	2	2	1	2	2	0	0	Eroded crista. 3 shaft bone callus d/t fracture
3	2	1	2	1	7	5*	2	2	0	0	4 shaft bone callus d/t fracture
4	1	1	2	1	4	1	2	3	0	0	None
5	1	1	1	1	6	1	2	3	0	0	None
6	3	1	2	1	3	1	1	1	0	0	None
7	1	2	2	2	3	1	1	1	0	0	None
8	3	2	2	2	3	2	2	3	0	0	None
9	1	1	2	1	4	2	2	3	0	0	1 head dorsal lipping
10	3	1	2	2	8	2	2	3	0	0	4 proximal arthritic change. 5 styloid process exostosis
11	1	2	2	1	1	1	2	2	3	0	None
12	2	1	2	2	7	1	1	1	0	0	None
13	1	1	2	4	3	1	2	3	0	0	1 - 5 proximal arthritic changes. 3 & 4 distal shaft deviation
14	1	1	2	4	3	1	2	3	0	0	None
15	1	1	2	1	1	1	1	1	0	0	1 head dorsal exostosis and dorso-medial hypertrophy
16	1	2	2	2	3	1	1	1	0	0	1 head dorso-medial hypertrophy
17	1	3	3	1	2	2	1	1	0	0	1 head dorso-lateral hypertrophy. 1 -5 proximal arthritic changes
18	2	1	2	5*	3	1	2	1	0	0	1 head dorso-lateral hypertrophy.
19	2	1	2	1	9	2	2	2	0	0	None
20	1	2	2	4	8	1	2	3	0	0	1 head dorso-medial hypertrophy
21	1	1	3	1	2	1	2	3	0	0	1 head dorso-medial hypertrophy
22	2	1	2	1	4	2	2	3	0	0	1 head dorso-medial hypertrophy
23	3	2	2	1	3	2	2	1	0	0	3 distal shaft lateral deviation
24	2	1	2	3	2	2	2	1	0	0	None
25	1	1	3	2	3	1	2	3	0	0	None
26	1	1	3	2	3	2	1	3	0	0	1 head dorsal-lateral and dorso-medial hypertrophy
27	3	1	2	2	3	1	2	3	0	0	1 head dorso-lateral and dorso-medial hypertrophy. Erroded crista
28	1	1	2	1	6	1	2	2	0	0	1 head dorsal-lateral hypertrophy
29	1	1	3	1	3	2	2	1	0	0	None
30	3	1	1	2	3	1	2	3	0	0	1 head dorso-lateral hypertrophy. 5 head dorsal lipping

Table A5.8: Summary of the European female morphological traits and associated pathological lesions.

	1Head	1Base	1L	2M	2L	3M	3L	4M	4L	5Var	PATHOLOGICAL LESIONS
1	3	2	2	1	1	1	2	1	0	0	None
2	1	2	1	1	3	2	1	1	0	0	1 head dorsomedial hypertrophy; osteophytosis medial articular margin
3	1	1	2	1	1	1	2	3	0	0	1 head articular surface laterally deviated - bunion? 5 irregular shaft
4	3	1	2	2	8	1	1	1	0	0	1 head lipping of crista and planter extensions. 2, 4, 5 int tuber ridges.
5	1	1	1	1	1	1	1	1	0	0	1 base osteophyte lateral articular facet; head dorso-medial eminence
6	1	1	2	1	2	2	2	3	0	0	None
7	1	1	2	2	4	1	1	1	0	0	1 head extensive planter lipping
8	1	1	2	1	3	2	1	1	0	0	4 & 5 inter-tuber ridges
9	1	2	2	2	3	1	2	1	0	0	None
10	1	1	2	4	2	2	2	1	0	0	1 head extensive planter lipping
11	1	1	2	1	1	1	2	2	0	0	1 head doso- medial hypertrophy; inferior lateral margin osteophytosis
12	1	1	2	1	1	1	2	1	0	0	None
13	1	2	1	1	2	1	1	1	0	0	1 base osteophyte lateral articular facet
14	1	1	2	2	3	2	1	1	0	0	1 head dorso-medial hypertrophy
15	2	2	2	1	8	1	2	3	0	0	1 head severe cavitation
16	1	1	2	2	3	1	2	2	0	0	None
17	1	2	2	2	3	1	1	1	0	0	1 head dorso-medial hypertrophy
18	1	1	1	4	2	1	2	1	0	0	1 head osteophytes planter extensions
19	1	1	1	1	3	1	1	1	0	0	1 head dorso medial and lateral eminence
20	1	1	2	2	3	1	2	3	0	0	None
21	1	2	3	2	1	1	2	3	0	0	1 head osteophytes planter extensions; dorso-medial eminence
22	1	1	2	1	3	1	2	2	0	0	1 head osteophytes planter extensions; dorso-medial eminence
23	1	1	1	1	3	2	1	1	0	0	1 head osteophytes planter extensions; dorso-medial eminence
24	1	2	2	1	3	1	1	1	0	0	2 - 4 narrowing of bases - close packing of bones?
25	1	1	2	4	3	1	1	1	0	0	1 head dorso-medial hyertrophy
26	1	2	1	1	3	2	1	1	0	0	1head dorso-medial and dorso-lateral hypertrophy.
27	1	1	2	1	3	1	1	1	0	0	1 head dorso-medial eminence and cavitation
28	1	2	1	4	1	1	2	3	0	0	4 intertuber ridge; 5 shaft laterally deviated
29	1	2	1	1	3	1	2	3	0	0	None
30	1	2	1	1	1	2	1	2	0	0	1 dorso-laterall hyertrophy

Table A5.9: Summary of the European male morphological traits and associated pathological lesions.

	1Head	1Base	1L	2M	2L	3M	3L	4M	4L	5Var	PATHOLOGICAL LESIONS
1	3	1	3	6	2	1	2	3	0	0	1 head dorso-lateral hypertrophy, lipping planter crista
2	1	1	2	1	1	1	2	3	0	0	None
3	3	2	2	1	3	2	1	1	0	0	3 & 4 shafts lateral deviation
4	1	1	3	1	1	1	2	2	0	0	1 head dosal exostosis; planter extension osteophyte; crista erroded
5	3	2	2	2	1	2	1	1	0	0	2, 3, 4 intertuber ridge
6	3	1	3	2	2	1	1	1	0	0	1 head dorso-medial cavity
7	1	2	2	2	1	1	2	2	0	0	1 head lateral tuber hypertrophy
8	3	1	2	1	5	1	2	1	0	0	1 head dorso-medial hyertrophy
9	1	1	3	1	3	2	1	1	0	0	1 head dorso-lateral eminence
10	1	1	2	1	1	1	2	1	0	0	1 inter tuber ridging
11	1	1	2	1	1	1	2	3	0	0	1 head doso- medial hypertrophy
12	3	1	2	2	1	1	1	1	0	0	None
13	1	2	2	1	3	1	2	2	0	0	1 head prominent medial tuber
14	1	2	2	1	6	6	2	2	0	0	5 hypertrophied styloid process
15	1	1	3	6	1	1	2	3	0	0	None
16	1	1	2	1	8	4	1	1	0	0	1 head dorso-medial and dorso-lateral eminece; 3 inter-tuber ridge
17	1	1	2	4	4	2	2	1	0	0	1 head dorso-medial eminence; 2 & 3 midshaft callus - fracture?
18	1	1	2	3	3	1	2	1	0	0	1 head doso- medial and dorso-lateral hypertrophy; lipping lat art margin
19	1	1	3	1	1	1	2	3	0	0	1 hypertrophy lateral tuber; 3 & 4 inter-tuber ridges
20	3	1	3	1	3	1	1	2	0	0	1 head slight lipping med margin
21	1	1	1	1	8	1	2	2	0	0	1 head lateral tuber hypertrophy. Laterally deviated; 3 - 5 head
22	1	1	3	3	3	2	1	1	0	0	1 head dorso-medial exostosis; bunion?
23	1	2	1	1	3	2	1	1	0	0	1 dorso-medial hypertrophy; 5 inter-tuber ridge
24	1	1	2	1	3	2	2	1	0	0	1 head dorso-medial, dorso-lateral eminece;1 & 2 part inter-tuber ridge
25	1	1	2	2	6	1	2	1	0	0	5 slight inter-tuber ridging
26	1	1	1	1	1	1	1	1	0	0	1 dorso-mediall hypertrophy. PASA laterally deviated - bunion?
27	1	1	2	2	3	1	2	2	0	0	2 & 3 partiall inter-tuber ridge
28	1	1	2	1	3	1	1	1	0	0	1 head dorso-med hypertrophy. 5 inter-tuber ridge
29	1	1	2	1	2	1	1	2	0	0	1 head slight dorso-medial hypertrophy
30	1	1	1	1	1	1	1	1	0	0	None

Table A5.10: Summary of the pre-pastoral pooled and unknown sex morphological traits and associated pathological lesions.

	1Head	1Base	1L	2M	2L	3M	3L	4M	4L	5Var	PATHOLOGICAL LESIONS
1	2	2	2	1	3	2	1	1	0	0	Eroded Crista
2	3	2	1			1	2	3	0	0	Eroded Crista
3	2	1	2	2	3	4	2	3	0	0	Eroded Crista
4	1	1	2	1	3	2	2	3	0	0	1 head medial hypertrophy
5	1	1	2	1	3	1	2	3	0	0	5 met-cuboid arthritic changes
6	1	1	1	1	3	2	1	2	0	0	prominent styloid
7	1	1	3	1	3	4	2	1	0	0	1head lateral hypertrophy
8	3	1	3	1	3	1	1	1	0	0	None
9	1	1	2	1	3	2	1	1	0	0	None
10	1	2	1	1	3	1	2	3	0	0	None
11	1	1	2	2	3	2	2	3	0	0	1 eroded planter extension. RA knees
12	1	2	1	1	2	2	1	1	0	0	None
13	1	1	2	1	3	2	2	3	0	0	None
14	1	1	2			1	2	3	0	0	None
15	2	1		4	2	2	2	3	0	0	None
16	1	1	2	1	3	1	2	3	0	0	1 Irregular cotex
17	1	2	1	1	8	2	2	3	0		None
18	2	1	2	1	3	1	1	1	0	0	1 eroded planter extension. Callus d/t #
19	1	1	2	1	3	1	2	3	0	0	None
20	2	2	1	1	6	1	2	3	0	0	None
21	1	1	1	2	4	2	2	3	0	0	None
22	1	1	2	1	3	1	1	3	0		1 eroded planter extension.
23	1	1	1			4	2	3	0	0	1 head medial hypertrophy
24	1	1	3							0	1 MPJ arthritic change
25				1	4			3	0	0	4 met-cuboid arthritic change
26	1	1	2	1	4	4	2	1	0	0	None
27	1	2	3	1	3	2	1	1	0	0	3 met-cuboid arthritic change
28	1	1	2	1	3	1	2	1	0	0	2 Kneeling marker?
29	1	1	2	2	1	1	2	3	0	0	None
30	1	1	2	2	6	6	2	3	0	0	None

	1Head	1Base	1L	2M	2L	3M	3L	4M	4L	5Var	PATHOLOGICAL LESIONS
31	1	1	2	1	2	2	2	3	0	0	1 intertuber ridge
32	1	1	2	1	7	4	2	2	0	0	3 intertuber ridge
33	1	1	2					3			None
34	1	1	1								None