# A NEW SUBSPECIES OF RATTUS BARTELSII (JENTINK) FROM CENTRAL JAVA. 

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Rattus bartelsii obscuratus subsp. n.
Type:-Adult male (skin and skull), coll. M. Bartels Jr. no. Sl 37, G. Slamet, Central Java, ca. 2500 m, Aug. 26, 1933, M. Bartels Jr. \& P. J. Bouma leg.

Diagnosis: - Differs from R. b. bartelsii from G. Pangrango-Gede, W. Java, by the following characters: both body and skull smaller; hindfoot and ear distinctly shorter; hindfeet (skin and hairs) more obscured (less white) than in the typical race; tail not so purely white beneath, the white, especially on the basal part of the tail and sometimes over the whole of its length, darkened by a more or less distinct greyish violet tinge; fur on head and back as a rule darker (less yellowish) ; abdomen as in bartelsii typicus but never showing a (slight) suffusion of yellowish brown (which sometimes occurs in the latter form) ; frequently a distinct yellowish brown collar (which seems never to be exhibited by the typical race); line of demarcation between the colours of the upper and lower parts as a rule sharper.

Measurements: See next page.
(The measurements of 3 adult males of $R$.b. bartelsii from G. Pangrango in my collection (measurements taken in the same way) are: head and body 136-159 (average 146.5) ; tail 131.5-139 (134.5); ear 22.5-24 (23.16); hindfoot 32-33.5 (32.83) ; skull, greatest length 36.8-38.3 (37.4) ; basal length 30.6-32.5 (31.43) ; zygom. breadth 15.6-16.3 (15.93); median length nasals 14.4-15.4 (14.96) ; greatest breadth comb. nasals 3.6-3.9 (3.73) ; palat. foram. 6.2-6.3 (6.23); diastema 10.1-10.5 (10.26) ; upper mol. row $5.2-5.4$ (5.3) mm. Two adult females measure: head and body $135-145$ (140); tail 135.5-138 (136.75) ; ear 23.5 ; hindfoot 32-33.5 (32.75) ; skull, greatest length 36.5-37.2 (36.85) ; basal length 31.431.7 (31.55) ; zygom. breadth 15.9-16.6 (16.25) ; median length nasals 14.3-14.6 (14.45) ; greatest breadth comb. nasals 3.8-4.3 (4.05) ; palat. foram. 6.2-6.3 (6.25); diastema 10.2-10.3 (10.25); upper mol. row 5.3 mm ).

Specimens examined: - 26 (ad., subad. and juv.), all from the type locality, W. slopes of G. Slamet, ca $1500-2500 \mathrm{~m}$. (For comparison I disposed of 26 spe cimens (ad., subad. and juy.) of $R .6$. bartelsii from the type locality: S.W. slopes of G. Pangrango, ca $1500-2000 \mathrm{~m}$ ).

Measurements: ${ }^{1}$ )

| $\stackrel{-}{-}$ |  |  |  |  |  | Skull |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\times}{\stackrel{\rightharpoonup}{*}}$ |  | $\stackrel{\tilde{\pi}}{\leftarrow}$ | 年 |  |  |  |  |  |  | eu!ue九of fejeled | $\begin{aligned} & \stackrel{\pi}{E} \\ & \stackrel{0}{0} \\ & \stackrel{\pi}{0} \end{aligned}$ | $\begin{aligned} & 3 \\ & 0 \\ & 0 \\ & \frac{0}{c} \\ & \vdots \\ & \text { a } \\ & \text { a } \\ & 5 \end{aligned}$ | Remarks |
| S1 2 | $\sigma^{*}$ | 133.5 | 1345 | 20.5 | 30.5 | 34.4 | 28.8 | 15.5 | 13.1 | 3.6 | 5.7 | 9.5 | 5.1 | Test. 20 mm |
|  | , | 144.5 | $111+x$ | 21 | 31.5 | 35.8 | 30.6 | 16.5 | 13.9 | 3.5 | 6.1 | 99 | 5 | $\left\{\begin{array}{l}\text { Test. large, } 23 \mathrm{~mm} \\ \text { reeth worn }\end{array}\right.$ |
|  | " | 1305 | 133.5 | 20 | 31 | 34 | 28.7 | 15.5 | 12.4 | 3 | 5.6 | 9.2 | 5.1 | Test. mod. devel. |
| ,, 13 | , | - | 128 | $2) .5$ | 29.5 | 342 | 28.3 | 156 | 13 | 3.3 | 5.4 | 9.3 | 5 | $\left\{\begin{array}{l} \text { Test. large } \\ \text { T. w. } \end{array}\right.$ |
| , 14 | " | 137 | 126 | 19 | 30 | - | - | 15.3 | 131 | 3.3 | 5.6 | 9.3 | 5.2 | $\left\{\begin{array}{l} \text { Test. large } \\ \text { T. w. } \end{array}\right.$ |
| $37$ | " | 140 | 135 | 20.5 | 30.5 | 34.8 | 29.9 | 15.6 | 13.4 | 3.7 | 6.1 | 9.8 | 5.2 | $\left\{\begin{array}{l}\text { Test. } 22.5 \mathrm{~mm} \\ \text { T. sl. w. } \\ \text { Type - }\end{array}\right.$ |
| , 4 | ¢ | 136 | 127 | 21 | 29 | - | - | 15.6 | 12.9 | 3.4 | 58 | 9.6 | 4.9 | $\left\{\begin{array}{l} \text { Mamm, muchdevel. } \\ T . \text { w. } \end{array}\right.$ |
| , 22 | " | 117 | โ20.5 | 20 | 29.5 | 32.9 | 27.2 | 14.9 | 12.2 | 3.1 | 5.7 | 8.6 | 52 | Mamm.muchdevel. |
| ,, 25 | " | 122 | 126.5 | 19.5 | 30 | - | - | 14.9 | 12.3 | 3.3 | 5.6 | 8.9 | 5.1 | , ", " |
| ,, 27 | " | 120.5 | 128.5 | 20 | 23.5 | 336 | 27.9 | 15.2 | 12.4 | 3.3 | 5.6 | 9.1 | 5.1 | ," ", " |
| , 34 | " | 113 | 130 | 19.5 | 28 | - | 276 | 14.6 | 123 | 3.1 | 56 | 9.1 | 4.9 | " ." " |
| , 53 | , | 121.5 | 133 | 195 | 29.5 | 32.9 | 27.7 | 15.1 | 123 | 3.1 | 5.6 | 9 | 5.2 | Mamm. mod. devel. |

${ }^{1}$ ) In this particular case the head-and-body-length was taken from the tip of the nose to the anus. As in the adult males, owing to the development of the testes, the anus has moved a good deal backwards, the h.-a.-b.-1. of the latter obtained by employing this method becomes larger, relatively, than that of the females, whereas in the case of the tails just the reverse comes true. The figures thus obtained consequently must be considered separately for each of the two sexes. (To avoid this drawback I now use the hind-border of the thigh-muscles at the base of the tail as a boundary-point. See for my opinion about this subject: H. J. V. Sody, Nat. Tijdschr. Ned. Ind., 94, p. 177).

All of my specimens were measured after having been preserved in spirit.

