

TWO NEW HARVEST MICE FROM COSTA RICA

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In a review of the Costa Rican harvest mice in the American Museum collection, I find two new species. One, a moderately large *Reithrodontomys* with a highly inflated braincase, taken at 9400 feet on Volcan Irazu along with a series of *R. creper*. The other, a small species from the San Carlos Valley, with an unusually short rostrum and a short broad skull.

***Reithrodontomys brevirostris*,**
new species

TYPE.—No. 139727, Amer. Mus. Nat. Hist.; female adult; Laja Villa Quesada, altitude 5000 feet; Province Alajuela, Costa Rica, September 16, 1941, collector, C. F. Underwood. The type is a skin and skull in good condition, molar teeth showing considerable wear. Besides the type there are three adult topotypes and one from Zapote.

GENERAL CHARACTERS.—A small dusky colored harvest mouse with moderately long, thick pelage, long unicolor tail; superficially resembling members of the *mexicanus* group but size smaller, color darker, and with well-marked cranial differences.

DESCRIPTION.—Type: color of upperparts bright ochraceous tawny, heavily mixed with black on mid-dorsal region, and grading to clear ochraceous tawny along sides of body; fore and hind feet dull white with a broad median stripe of hair brown to base of toes; tail, unicolor, fuscous; ears fuscous black; underparts white, the line of demarcation well defined. Skull small, with a short rostrum; nasals short and evenly tapered posteriorly, ending on a line with premaxillae, anterior portion of frontals depressed and forming a shallow sulcus at posterior border of nasals; zygomata relatively strong and squarely spreading anteriorly from axis of skull, its sides parallel and not contracted anteriorly; braincase small, globular and well inflated; interpterygoid fossa broad, anterior palatine foramina short and ending in front of anterior border of first molars; palate narrow, molariform teeth small.

MEASUREMENTS.—Type, three adult females and one adult male in parentheses: total length, 180 mm., (163, 191, 180, 182); tail vertebrae, 104, dry, 114, (97, 113, 110, 112); hind foot, 17, dry, 16.5, (17, 18, 19, 17); ear, 13, (13, 14, 14,

—). Skull: greatest length, 21.1, (20.5, 22, 21.1, 22.5) breadth of braincase, 10.7, (10.7, 10.6, 10.5, 10.8); length of nasals, 7.2, (7.1, 7.5, 7, 7.7); width of outer wall of anteorbital foramen, 1, (1.1, 1.3, 1.3, 1.2); zygomatic width, 11.3, (11, 11.2, 11, —); width of palate across first molars, 4.4, (4.3, 4, 4.3, 4.5); alveoli of upper molar series, 2.8, (2.85, 2.9, 2.9, 3).

Externally *Reithrodontomys brevirostris* suggests rather close relationship with the *mexicanus* group, but there are well-marked cranial differences, especially in the peculiarly short rostrum, squarely spreading zygomata and small but well-inflated braincase. In size it is smaller than any of the known forms of the *mexicanus* group with a relatively longer tail and smaller molariform teeth.

***Reithrodontomys rodriguezii*,**
new species

TYPE.—No. 141195, Amer. Mus. Nat. Hist., adult female; Volcan Irazu, altitude 9400 feet, Province Cartago, Costa Rica; collector, C. F. Underwood, August 21, 1941. The type is a skin and skull in good condition. Besides the type there is one male topotype in fair condition.

GENERAL CHARACTERS.—A moderately large harvest mouse with soft dense pelage, long unicolor tail, large ears and white underparts. Skull with greatly enlarged braincase and narrow rostrum; dentition with small but distinct accessory tubercles between the main cusps on upper molars.

DESCRIPTION.—Type: color of upperparts cinnamon buff, darkened on dorsal area with long black hairs, becoming clearer cinnamon buff on head, shoulders and lower sides of body; ears mummy brown; a dusky ring around eyes; tail nearly uniform dresden brown, extreme tip white; fore and hind feet white with a broad wedge of dark color extending to base of toes; underparts white, the line of demarcation sharply defined. Skull large with a very large and highly inflated braincase; rostrum long and narrow; nasals narrowed to a point posteriorly, ending on a line with premaxillae; anterior portion of frontals depressed, forming a shallow sulcus at posterior border of nasals; zygomata slender, slightly contracted anteriorly; palatal foramina

long, reaching plane of first molars; bullae small and rather flat; molar teeth large.

MEASUREMENTS.—Type: total length, 190 mm.; tail vertebrae, 107, dry, 125; hind foot, 20, dry, 21.5; ear, 15, from notch, dry, 13.5. Skull: greatest length, 23.6; breadth of braincase, 11.9; length of nasals, 8.4; interorbital width, 3.7; width of palate across first molars, 5.1; width of outer wall of anteorbital foramen, 1.2; alveoli length of upper molar series, 3.6.

Reithrodontomys rodriguezi requires no close comparison with *microdon* but seems to be much nearer to *tenuirostris*. Major Goldman, who kindly compared the type with *tenuirostris*, said that the skulls are so similar that they suggest rather close relationship, but there are well-marked differ-

ences. Instead of inclining toward the cinnamon color of *rodriguezi*, *tenuirostris* is darker and nearer Mikado brown; the tail of *rodriguezi* is longer and the braincase higher and more fully inflated than in the Guatemala species, though the skulls are about the same length. The type was taken in long grass at the edge of the rain forest on Volcan Irazu.

This species is named in honor of Sr. Juvenal Valerio Rodriguez, Director of Museo Nacional, Costa Rica, in appreciation of his cooperation in securing collections for The American Museum of Natural History.