= Veratalpa =

Veratalpa lugdunensiana is a fossil mammal from the Miocene of France . Known from a single astragalus (a footbone) , the species was assigned to its own genus , Veratalpa , by Florentino Ameghino in 1905 . He placed it in Talpidae , the family of the moles , but in 1974 , John Howard Hutchison argued that the astragalus was not talpid and more likely came from a rodent . The astragalus is about 4 @.@ 5 mm long , broad for a talpid , and has the head oriented farther from the axis of the foot than in talpids .

= = Taxonomy = =

Argentine naturalist Florentino Ameghino described Veratalpa in an overview of the astragali from the middle Miocene of Vieux Collonges in France . The astragalus is a bone of the foot that is part of the ankle joint . He listed several species of the family Talpidae (moles and related species) from Vieux Collonges , including " espèce C " (" species C ") , which he named as a new genus and species , Veratalpa lugdunensiana , in a footnote . In a 1906 review of Ameghino 's paper , Édouard Louis Trouessart affirmed that Veratalpa probably represented a new genus of mole , but noted that the specific name lugdunensiana would have been more correctly written " lugdunensis " . According to Trouessart , the suffix -ana is appropriate for names that reference persons , but not for those that refer to places , such as this name , which is derived from Lugdunum (the Latin name for Lyon) . In a 1974 review of Miocene European talpids , John Howard Hutchison wrote that the astragalus of Veratalpa lacked any features that would ally it with talpids and commented that it was most likely a rodent . In their 1997 Classification of Mammals , Malcolm McKenna and Susan Bell listed Veratalpa as a member of Placentalia of uncertain affinities .

= = Description = =

The astragalus of Veratalpa is the largest among those from Vieux Collonges that Ameghino assigned to Talpidae . Although at 4 @ .@ 5 mm it is about as long as his " species A " , it is broader , and Hutchison noted the broadness as one of the characters that argue against classification of Veratalpa in Talpidae . Like living moles , it has a broad , flat , and short head , but it forms a noticeably small angle with the body ? in actual moles , the head is more axially oriented (i.e. , towards the central axis of the foot) . The surface of the head that contacts the navicula is less rounded than in moles . The body is low and nearly square and has a diameter of about 3 mm . The trochlea ? a surface on the body of the bone that articulates with the tibia (lower leg bone) ? is not large and pulley @-@ like , as in talpids . There is a small perforation on the lower side of the body . This perforation is larger in Ameghino 's other supposed talpids , and Trouessart suggested on the basis of this feature that the internal parts of the toes were reduced in Veratalpa .

= = Distribution = =

Veratalpa is known only from the locality of Vieux Collonges near Lyon in southeastern France ; Ameghino knew this locality as " Mont @-@ Ceindre " . This rich fissure filling locality has yielded thousands of fossils and is currently dated to the early @-@ middle Miocene boundary , around 17 million years ago (MN 4 / 5 in the MN zonation) . As Veratalpa is known from a single astragalus , Ameghino considered it to be rare . He distinguished six talpid species among the astragali , but according to Hutchison only Ameghino 's species F (which was assigned to Talpidae with a query) is really a talpid .