

# Munda Speakers are the Oldest Population in India

C Winters

## Citation

C Winters. *Munda Speakers are the Oldest Population in India*. The Internet Journal of Biological Anthropology. 2010 Volume 4 Number 2.

## Abstract

The Munda live in North India among varying populations and linguistic groups. Researchers have assumed that the Munda represented the earliest Indian population. This theory has been recently disputed by researchers who claim a S.E. Asian origin for the Munda speakers. The S.E. Asian origin hypothesis is not supported by Munda mtDNA phylogeny, archaeology and linguistics. This evidence suggest an ancient presence of Munda speakers in India before the Dravidian and Indo-Aryan speaking populations.

## INTRODUCTION

The Munda live in North India among varying populations and linguistic groups. Researchers have assumed that the Munda represented the earliest Indian population. This theory has been recently disputed by researchers who claim a S.E. Asian origin for the Munda speakers. The S.E. Asian origin hypothesis is not supported by Munda mtDNA phylogeny, archaeology and linguistics. This evidence suggest an ancient presence of Munda speakers in India before the Dravidian and Indo-Aryan speaking populations.

## MUNDA SPEAKERS

The HUGO Pan-Asian SNP Consortium has done much to bring the genetic data for India in line with the archaeological, anthropological and linguistic data<sup>1</sup>. The archeological evidence indicated that the first settlers of India were probably Austro-Asiatic (Munda) speakers, then Dravidian speakers and finally Southeast Asians speakers<sup>2-3</sup>.

There are three branches of Austro-Asiatic (AA): Munda, Mon-Khmer and Nicobarese. The Munda are classified into Southern and Northern branches situated in Central and Eastern India. The Khasi-Aslian speakers live in the Meghalaya state.

Although Chaubey et al argue for a SE Asian origin for the Munda speakers the linguistic and genetic data fails to support this conclusion<sup>4</sup>. The linguistic evidence makes it clear that eventhough Munda is placed in the AA Superfamily it is recognized as a separate branch<sup>5</sup>.

The AA languages probably originated in India<sup>5-6</sup>. The

present linguistic evidence suggest that AA spread from northeast India to Myanmar and Bangladesh.

Moreover, as noted by Blench linguist have not been able to reconstruct proto-Austro-Asiatic<sup>7</sup>. Given the lack of an abundance of cognate terms within AA we can not truly describe the relationship between the members of this language family as a genetic linguistic relationship.

The Munda languages are very old. South Munda dates to 18.4ky  $\pm$  2.4ky. The age of Indian Khasi-Aslian is 10.6+/- 1.6ky, while Munda generally dates to 12.4+/- 1.3ky<sup>8</sup>.

The Munda share similar biological backgrounds with other Indian speakers<sup>9</sup>. Yet, the genetic evidence also indicates that the Munda homeland, can not be determined solely on the ancestral home of speakers of Southeast Asian languages, including Khasi Aslian. This is supported by the large genetic variance found among and within Munda speakers<sup>10</sup>.

Chaubey et al argues that because the phylogeography of mtDNA R7 and y-chromosome marker M95 specific to O2a is found among Khasi-Aslian speakers, the Munda speakers probably originated in Southeast Asia (SEA)<sup>4</sup>. But Chaubey et al admit that there is a clear distinction between the Munda and Southeast Asian Khasi-Aslian speaking groups yet they place the origin of Munda speakers in SEA<sup>4</sup>. For example, Chaubey et al generally found that the PC-s clustered the Munda with Dravidian speakers, rather than the Khasi-Aslian speakers who are closer to Southeast Asian populations<sup>4</sup>.

The mtDNA of Munda speakers show a deep rooted ancestry in India. The Munda specific mtDNA haplogroups include M40a, M45, R7 and R6a. The Munda speakers cluster predominately in R7. The spread of R7 is centered within the AA “heartland”<sup>11</sup>.

Complete mtDNA sequence based typology discovered the deep rooted R7a1 subclade. The presence of R7a1 among Indo-European and Dravidian speakers probably is the result of their living in close proximity to AA speakers is bet explained by language shift given the antiquity of y-chromosome O2.

Thangaraj et al using coalescence time and archaeological evidence illustrated that the TRMCA for mtDNA R8 which is found among Munda speakers have the following dates : R8 (41.7 kya), R8a (15.4 kya) and R8b (27.7 kya)<sup>13</sup>. The dating for mtDNA R8 indicates that this haplogroup and R7 are probably autochthonous to India.

The mtDNA of Munda speakers also includes deep rooted haplogroups from macrohaplogroup M. In addition to mtDNA haplogroup M2, we also find M58, M31, M6a2 and M42 among Munda speakers.

The Munda y-chromosome is O2a (M95). Kumar reports a coalescent rate of 65kya for Indian M95<sup>3</sup>

There is a clear distinction of Indian Munda and Southeast Asian (SEA) Mon-Khmer speakers. The predominate SEA O clades are O3 and O1a. If SEA males had carried the y-chromosome O haplogroup to India there should be evidence of these clades among the Munda speakers—but they are nil<sup>8</sup>. On the otherhand, SEA males carry Indian y-chromosomes such as F,H, K2 (T) and etc<sup>8</sup>.

This indicates an early migration of Munda speakers to SEA. It suggest that Munda spread mtDNA R7 and y-chromosome haplogroup O to SEA.

Many Indians carry Munda haplogroups. The spread of Munda haplogroups are probably the result of conquest and intermarriage. The mythology of some Indian populations support this proposition.

Munda mythology claims that when they arrived in the Chotanagpur Region the Asuras would not allow Munda to stay in their territory<sup>9</sup>. And as a result, the Munda gods punish the Asuras by making Asura women become a part of the Munda tribe, and the Asura males were burnt to death in the Asura iron smelting furnaces<sup>9</sup>. This myth implies that the

Munda took Asura territory after violent conflict.

A good example of this exchange comes from the Chotanagpur region. Here the Munda play an important role in the society, because they granted land to migrants who settled the Ranchi district<sup>9</sup>. According to the Oraon traditions they had to give up their gods and language to settle on Munda lands<sup>9</sup>.

In conclusion , the molecular variance of the mtDNA of Munda speakers fails to support a Southeast Asian origin for this population. The probable dating of y-chromosome O2a at 65kya<sup>7</sup> and mtDNA R8 at 41.7 kya<sup>13</sup> suggest a deep rooted ancestry for Munda speakers in India.

The presence of Munda mtDNA R7 among Dravidian and Khasi Aslian groups is probably the result of gene flow. This view is supported by the fact that the Dravidian speakers only arrived in India 5kya from Africa<sup>14-15</sup>. This would explain why Dravidian tribal populations and Africans share several y-chromosomes<sup>16</sup>.

## References

1. The HUGO Pan-Asian SNP Consortium. 2009. Mapping Human Genetic Diversity in Asia. *Science* , 326(5959):1541 – 1545.
2. Cordaux R, Saha N, Bentley GR, Aunger R, Sirajuddin SM, et al. 2003. Mitochondrial DNA analysis reveals diverse histories of tribal populations from India. *Eur J Hum Genet* 11: 253–264.
3. Kumar V, Reddy ANS, Babu JP, et al. 2007. Y-chromosome evidence suggests a common paternal heritage of Austro-Asiatic populations. *BMC Evolutionary Biology*, 7:47.
4. Chaubey G; Metspalu M; Ying Choi; Magi R; et al. (2010). Population Genetic Structure in Indian Austroasiatic speakers: The Role of Landscape Barriers and Sex-specific Admixture. *Molecular Biology and Evolution* 2010; doi: 10.1093/molbev/msq288. <http://mbe.oxfordjournals.org/content/early/2010/10/26/molbev.msq288.full.pdf?ijkey=fq81NDB59bHykIm&keytype=ref>
5. Diffloth, G. 2005. The contribution of linguistic paleontology and Austroasiatic. In Laurent Sagart, Roger Blench and Alicia Sanchez, eds., *The Peopling of East Asia : Putting Together Archaeology, Linguistics and Genetics*. Pp.77-80. London : Routledge Curzon.
6. Priyadarshi, P. 2010. Recent Studies in Indian Archaeo-linguistics and Archaeo-genetics having bearing on Indian Prehistory, Joint Annual Conference of Indian Archaeology Society, Indian Society for Prehistoric and Quaternary Studies, Indian History and Culture Society, Lucknow, 30 December, 2010.
7. Blench, R. 2009. Reconciling reconstructions of subsistence and archaeological dates for the transition to agriculture in S.E. Asia. *Language Phyla*.
8. [rogerblench.info/Archaeology%20data/SE%20Asia/Siem%20Reap%202009/Blench%20Siem%20Reap%202009%20paper.pdf](http://rogerblench.info/Archaeology%20data/SE%20Asia/Siem%20Reap%202009/Blench%20Siem%20Reap%202009%20paper.pdf)
9. Priyadarshi, P. 2011. Did Austro-Asiatic speakers

originate in China/Southeast Asia and then migrate to India with rice agriculture. Retrieved : March 7, 2010 at 10. docstoc.com/docs/72779579/Review-of-Chaubey

11. Ghosh, A. 2009. Prehistory of the Chotanagpur Region Part 4: Ethnoarchaeology, Rock Art, Iron and the Asuras. *Internet Journal of Biological Anthropology*, vol. 3, No. 1.

12. Chandrasekar A, Kumar S, Sreenath J, Sarkar BN, Urade BP, et al. 2009 Updating Phylogeny of Mitochondrial DNA Macrohaplogroup M in India: Dispersal of Modern Human in South Asian Corridor. *PLoS ONE* 4(10): e7447. doi:10.1371/journal.pone.

<http://www.plosone.org/article/info:doi/10.1371/journal.pone.e0007>

13. Chaubey, G. 2010b. The demographic history of India: A perspective based on genetic evidence. *Dissertationes Biologicae Universitatis Tartuensis*. August 9 2010. Tartu University Press.

14. Chaubey G, Karnum M, Metspalu M, Deepa SR. 2008. Phylogeography of mtDNA haplogroup R7 in the Indian Peninsula. *BMC Evolutionary Biology*, 8:227. doi:10.1186/1471-2148-8-227

15. [biomedcentral.com/1471-2148/8/227](http://biomedcentral.com/1471-2148/8/227)

16. Thangaraj K, Nandan A, Sharma V, Sharma VK, Easwarkhanth M, et al. 2009 Deep Rooting In-Situ Expansion of mtDNA Haplogroup R8 in South Asia. *PLoS ONE* 4(8): e6545. doi:10.1371/journal.pone.

<http://www.plosone.org/article/citationList.action;jsessionid=802A19AA121DB2768046A726529EAF6.ambra01?articleURI=info%3Adoi%2F10.1371%2Fjournal.pone.0006545>

17. Winters, C. 2007. Did the Dravidian Speakers Originate in Africa? *BioEssays*, 27(5): 497-498.

18. Winters, C. 2008. ARE DRAVIDIANS OF AFRICAN ORIGIN

19. [krepublishers.com/02-](http://krepublishers.com/02-Journals/IJHG/IJHG-08-0-000-000-2008-Web/IJHG-08-4-317-368-2008-Abst-PDF/IJHG-08-4-325-08-362-Winder-C/IJHG-08-4-325-08-362-Winder-C-Tt.pdf)

[Journals/IJHG/IJHG-08-0-000-000-2008-](http://krepublishers.com/02-Journals/IJHG/IJHG-08-0-000-000-2008-Web/IJHG-08-4-317-368-2008-Abst-PDF/IJHG-08-4-325-08-362-Winder-C/IJHG-08-4-325-08-362-Winder-C-Tt.pdf)

[Web/IJHG-08-4-317-368-2008-Abst-](http://krepublishers.com/02-Journals/IJHG/IJHG-08-0-000-000-2008-Web/IJHG-08-4-317-368-2008-Abst-PDF/IJHG-08-4-325-08-362-Winder-C/IJHG-08-4-325-08-362-Winder-C-Tt.pdf)

[PDF/IJHG-08-4-325-08-362-Winder-](http://krepublishers.com/02-Journals/IJHG/IJHG-08-0-000-000-2008-Web/IJHG-08-4-317-368-2008-Abst-PDF/IJHG-08-4-325-08-362-Winder-C/IJHG-08-4-325-08-362-Winder-C-Tt.pdf)

[C/IJHG-08-4-325-08-362-Winder-C-Tt.pdf](http://krepublishers.com/02-Journals/IJHG/IJHG-08-0-000-000-2008-Web/IJHG-08-4-317-368-2008-Abst-PDF/IJHG-08-4-325-08-362-Winder-C/IJHG-08-4-325-08-362-Winder-C-Tt.pdf)

20. Winters, C. (2010). Y-Chromosome evidence of an African origin of Dravidian Agriculture *International Journal of Genetics and Molecular Biology*, 2(3): 030 – 033.

<http://www.academicjournals.org/IJGMB/PDF/pdf2010/Mar/Winters.pdf>

**Author Information**

**Clyde Winters**

Governors State University