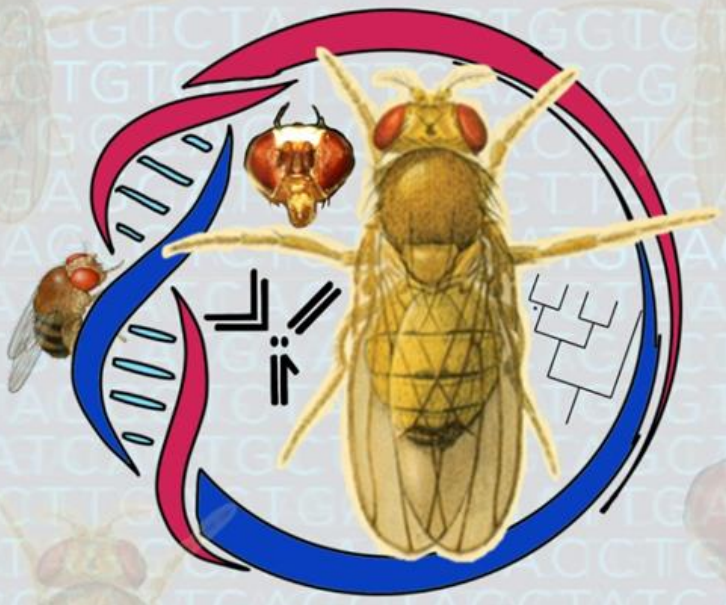
# University of Mysore Drosophila Genome Resources (UMDGR)



By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# Genomic resources of 6 members of *nasuta-albomicans* complex: Whole genome and gonadal transcriptome sequencing data

**About *nasuta-albomicans* complex:** *Drosophila nasuta nasuta* and *Drosophila nasuta albomicans* represent cross fertile members of the *immigrans* species group of *Drosophila* with an allopatric mode of distribution exhibiting characteristic novelties. The open genetic system in them permitting the formation of hybrids under laboratory settings has provided insights into both, post-zygotic incompatibilities as well as the establishment of stabilized fertile hybrid lines. The combinatorial crossing of various strains of these karyotypically diverged sibling species and their successive maintenance has resulted in an assemblage of stabilized hybrids termed Cytoraces. Cytoraces with their parental sibling species constitute the *nasuta- albomicans* complex (NAC) of *Drosophila*. NAC is by far the longest ongoing evolutionary experimentation in a laboratory setting in the genus *Drosophila* and the independently evolving populations of cytoraces are currently undergoing ~850 generations.

These genomic resources published in NCBI are a part of DBT funded project (No. BT/PR9871/BID/7/472/2013, Dated: 29-06-2015) titled “Unravelling the adaptive genome evolution by whole genome sequencing of *Drosophila nasuta nasuta* and laboratory evolved four hybrid strains, Cytoraces” sanctioned to Dr. N. B. Ramachandra, DoS in Genetics and Genomics, University of Mysore.

## Sequence data published in NCBI database

| Sl. no | Data type | Bioproject ID | NCBI-SRA accession | Species | Link |
|---|---|---|---|---|---|
| 1. | Genome sequences | PRJNA643690 (genomic DNA) | SRR12134549 | *D. n. nasuta* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR12134549 |
| | | | SRR12134548 | *D. n. albomicans* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR12134548 |
| 2. | Transcriptome sequences | PRJNA512942 (Ovary) | SRR8398946 | *D. n. nasuta* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR8398946 |
| | | | SRR8398945 | *D. n. albomicans* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR8398945 |
| | | | SRR8398944 | *Cytorace-2* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR8398944 |
| | | | SRR8398943 | *Cytorace-3* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR8398943 |
| | | | SRR8398948 | *Cytorace-9* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR8398948 |
| | | | SRR8398947 | *Fissioncytorace-1* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR8398947 |
| | | PRJNA600771 (Testis) | SRR10875323 | *D. n. nasuta* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR10875323 |
| | | | SRR10875322 | *D. n. albomicans* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR10875322 |
| | | | SRR10875321 | *Cytorace-2* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR10875321 |
| | | | SRR10875320 | *Cytorace-3* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR10875320 |
| | | | SRR10875319 | *Cytorace-9* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR10875319 |
| | | | SRR10875318 | *Fissioncytorace-1* | https://www.ncbi.nlm.nih.gov/sra/?term=SRR10875318 |

# Research team

(From left to right) **Koushik Ponnanna C. R, Dr. C. Amruthavalli, Prof. N. B. Ramachandra, Rajanikanth C., Stafny Melony D Souza**

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