

# Primate fossil 'not an ancestor'



**The exceptionally well-preserved fossil primate known as "Ida" is not a missing link as some have claimed, according to an analysis in the journal Nature.**

The research is the first independent assessment of the claims made in a scientific paper and a television documentary earlier this year.

Dr Erik Seiffert says that Ida belonged to a group more closely linked to lemurs than to monkeys, apes or us.

His team's conclusions come from an analysis of another fossil primate.

The newly described animal - known as *Afradapis longicristatus* - lived some 37 million years ago in northern Egypt, during the Eocene epoch. And the researchers say it was closely related to Ida.

Ida lived some 47 million years ago and was given the scientific name *Darwinius masillae*.

“ This study would effectively remove Ida from our ancestry.”

Erik Seiffert, Stony Brook University

Dr Seiffert and his colleagues say that both *Afradapis* and *Darwinius* were in a sister group to the so-called "higher primates", which includes humans.

This extinct sister group, they say, was more closely related to lemurs and lorises.

## Cul-de-sac

"The suggestion that Ida [was]... specifically related to the higher primates, namely monkeys apes and humans, was actually a minority view from the start. So it came as a surprise to many of us who are studying primate palaeontology," said Dr Seiffert, from Stony Brook University in New York, US.

"Ida, which is a member of this genus called *Darwinius*, is in a fossil group called the Adapiforms which have traditionally been seen as more closely related to the lemurs and lorises - which live today in Madagascar, Africa and Asia - than to [monkeys, apes and humans]."

He added: "We have analysed a large data set based on observations we have made on almost 120 living and extinct primates and what we find... [is that] *Darwinius* and this new genus that we've described are not part of our ancestry.

"They are more closely related to lemurs and lorises than they are to tarsirs or monkeys, apes and humans. This study would effectively remove *Ida* from our ancestry."

Dr Jorn Hurum, from the Natural History Museum in Oslo, Norway, was one of the authors of the paper about *Ida* published in the journal *Plos One* this year.

Responding to the study in *Nature*, he said: "It's a very interesting paper, and - at last - this is the start of the scientific discussion around the specimen we described in May nicknamed *Ida*."

He added: "What the authors say is that this is an extinct side branch of the group leading to lemurs that is not in any way related to apes and monkeys.

"What we said in our scientific paper in May is that this group - including this new specimen described in *Nature* - has a lot of traits that are found in apes and monkeys."

However, Dr Seiffert and his colleagues regard such features as examples of "convergent evolution". This involves features arising independently in separate lineages, possibly as a response to similar evolutionary pressures.

**“ This group, including this new specimen described in *Nature*, has a lot of traits that are found in apes and monkeys ”**

Jorn Hurum, Natural History Museum, Oslo

<http://news.bbc.co.uk/2/hi/science/nature/8318643.stm>

Page last updated at 17:56 GMT, Wednesday, 21 October 2009 18:56 UK