

Nature News: 'Walking cactus' is arthropods' lost relative

Written by Chi

Thursday, 24 February 2011 12:18 -

Fossil find sheds light on how jointed legs of insects, spiders and crustaceans might have originated. A clue to how arthropods – the group of more than a million invertebrate species that includes insects, spiders and crustaceans – evolved their distinctive jointed legs has been discovered in southwestern China. Nicknamed the 'walking cactus' because of its spiny appearance, the *Diania cactiformis* fossil find is reported in a paper published today in *Nature*. The animal belongs to the Lobopodia, a now-extinct group of animals resembling worms with legs, which may have been a relative of today's velvet worms. But it is the first species of that group found to have the jointed legs typical of Arthropoda. "A lot of scientists had long suspected that arthropods evolved from lobopodians," says Gianni Liu, a palaeontologist from the Early Life Institute at Northwest University in Xi'an, China, and currently at the Free University of Berlin, who led the work. "But we did not have a single fossil we could point at and say, 'This is the first lobopodian with jointed legs'."