



Plants linked to diversity on Earth

Researchers spent more than 24,000 person days combing half a hectare of the San Lorenzo forest in Panama, accounting for all the micro-habitats and plant species from the forest floor to the top of the tree canopy.

Professor Raphael Didham from the University of WA was one of the authors of the recently published study of the forest by a team of 102 researchers.

He said the study spanned almost 10 years of field research and subsequent species identification by experts across the world.

They identified almost 130,000 arthropods (the biggest class of animals, including insects, spiders, crustaceans, millipedes and centipedes) representing more than 6000 species.

From this they estimated that a single hectare of rainforest would be inhabited by an average of more than 25,000 species.

They found that even for carnivorous arthropods, plant diversity was a powerful predictor of total species richness because plants provide the habitat structure and food-web resources on which other species depend.

“The work is important because it is the first time researchers have examined arthropods of all kinds – not just selected groups of insects – and established the strength of their association with plant species diversity,” Professor Didham said.