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Global barcode project to list all species

By PATRICIA REANEY in London

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A TEAM of international scientists has launched an ambitious project to genetically identify, or provide a barcode for, every plant and animal species on the planet.

By taking a snippet of DNA from all the known species on Earth and linking them to photographs, descriptions and scientific information, the researchers plan to build the largest database of its kind.

"We have discovered that it is quite possible to have a short DNA sequence that can characterise just about every form of life on the planet," Dr Richard Lane, director of science at the Natural History Museum in London, told a news conference yesterday.

Less than a fifth of the Earth's estimated 10 million species of plants and animals have been named.

Researchers working on the Barcode of Life Initiative hope that genetically identifying all of them in a standardised way on a global scale will speed up the discovery of new ones.

Current techniques used to identify minute differences between species are complicated, time consuming and require specialist knowledge.

"What we are looking at is a new method which will allow just about anyone, in any part of the world, to recognise organisms without recourse to a particular specialist," said Dr Lane. The initiative was launched at the International Conference for the Barcoding of Life in London by a consortium of museums, zoos, government agencies and organisations around the globe that study biodiversity.

"Our mission is to develop DNA barcoding as a scientific tool for rapid identification of species and to put that tool to work for both science and society," said Dr Scott Miller of the Smithsonian Institution in the United States and chair of the consortium. It already has about 50 members in 25 countries on six continents and the numbers are growing, according to Dr Miller.

The information it collects can be used to identify pathogens, carriers of disease, pests and to monitor endangered species. The initiative will begin with three projects.

One will provide barcodes for the 10,000 known species of birds by 2010, another will tackle the 23,000 types of marine and fresh water fish and a third will genetically label the 8000 kinds of plants in Costa Rica, Central America.