

BOPCo: A BARCODING FACILITY FOR ORGANISMS OF POLICY CONCERN

A BELGIAN CONTRIBUTION TO LIFEWATCH (EU FP7 ESFRI)

Enforcement of regulations on the international trade of globally or locally endangered species or on the import of other organisms of policy concern (species protected under CITES, invasive alien species, quarantine organisms, organisms falling under the Nagoya protocol on Access and Benefit Sharing) relies on rapid and accurate identification of these organisms or of products derived from them, when intercepted by customs or transport companies. Visual identification of individuals is not always possible but DNA sequence comparison (DNA barcoding) has become a reliable and rapid method to provide species/populations identification even when only small parts of organisms are available. DNA barcodes are now available for numerous taxa, including species of relevance to CITES, invasive alien species, and many others of policy concern.

BOPCo will:

Create a virtual laboratory and data network

A virtual resource (portal and database network) that links existing initiatives and provides access to tools enabling on the fly matching (e.g., through BLAST search) sequences of unknown identity with standard sequences held in a distributed network of databases .

Provide access to standard sequences of organisms of policy concern

Collate and production of standard barcode sequences of known identity and origin, and maintenance of the reference collections thereof.

Identify organisms of Policy Concern

Producing prioritised lists of organisms of policy concern and their corresponding most effective barcode identification technique.

Build a network of certified barcoding laboratories

Identifying and linking with competent laboratories, setting up a certification scheme and quality control system (e.g., to aim at ISO accreditation of laboratories)

Outreach and communication

Informing users (Customs, trade organizations, logistics firms,...) of the services of BOPCo; organizing hands-on workshops for users on, e.g., procedures for handling of tissues.

Interested in joining the network? Contact us!

BOPCo is a 5-year project and a Belgian federal contribution to the EU (FP7) Large Research Infrastructure project « LifeWatch ».

