

# SOAP requests from the Biodiversity Catalogue

The Biodiversity Catalogue is a product of the FP7 project [BioVel](#) (the Biological Virtual e-laboratory) and provides a curated catalogue of Biodiversity Web Services. These services most often work with SOAP as a messaging protocol. Users can do a request and something is returned.

Below some examples of the PESI name service. The complete list of services can be found on the [Biodiversity Catalogue page](#).  
Request for a PESI id for the common scoter (*Melanitta nigra*) using PYTHON

```
from suds.client import Client

url = 'http://www.eu-nomen.eu/portal/soap.php?p=soap&wsdl=1'
client = Client(url)

"""Request for id of scoter familiy"""
result = client.service.getGUID('Melanitta nigra')
pesiid = result.split(':')[len(result.split(':'))-1]
print pesiid

>>> 137073
```

Give species list with id's for the genus scoter (*Melanitta*)

```
from suds.client import Client

url = 'http://www.eu-nomen.eu/portal/soap.php?p=soap&wsdl=1'
client = Client(url)

"""give all possible memebers of the scoter genus"""
searchspecies = 'Melanitta'
result = client.service.getPESIRecords('%{species}%'.format(species=searchspecies))

if len(result) > 0:
    print 'resultlist of species search for {species}'.format(species=searchspecies)
    print 'rank name  PESIid'
    for s in result:
        print s[4],s[2],s[1].split(':')[len(s[1].split(':'))-1]

>>>
resultlist of species search for Melanitta
rank name  PESIid
Genus Melanitta 137002
Species Melanitta americana 366594
Species Melanitta deglandi 96540
Species Melanitta fusca 137072
Species Melanitta nigra 137073
Subspecies Melanitta nigra americana 366593
Species Melanitta perspicillata 159095
```

Why should you use this? In case of working with biological data there is always dispute about the naming of the observed species. PESI is the European name list which has a reference to all species descriptions. If you are looking for a description of species as metadata within a project you could use this service to give correct descriptions. This is metadata on the level of records, not data sets. PESI is the back bone of the INSPIRE metadata vocabularies concerning biological data.