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In this context we started a survey of possible PIPs in the Belgian malacofauna and present here a genetic characterization of the landsnail *Isognomostoma isognomostoma*. The distribution of this species is confined to the mountainous regions of Central Europe, from the Harz, Sauerland and the Eifel region in the north, the Carpathians in the east and the Alps, Jura and Vosges in the south and southwest. The species occurs also in Belgium in a small, isolated, peripheral area (La Roche-en-Ardenne), where it was recorded for the first time in 1970. Using morphometric and allozyme data we aimed at determining whether, and to what degree, the Belgian *I. isognomostoma* population is differentiated from the populations elsewhere in Europe and thus may represent an ESU. Similarly, these data allow an assessment of the genetic impoverishment that may have occurred in Belgian *I. isognomostoma*.

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**Willow diversity in the fresh water tidal area of the river Schelde:**
**natural, spontaneous, anthropogenic?**

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The fresh water tidal area of the Schelde-estuary is characterised by a large willow diversity and a prominent presence of willow-dominated vegetation. Marsh vegetation consists for over 60% of willow scrub and willow forest. These are natural vegetation types on fresh water tidal marshes, and are considered most important climax vegetation under fresh water tidal circumstances. Along the Schelde-estuary (as well as in other parts of the river valley) several willow species were planted though. On numerous occasions tidal willow scrubs and forests therefore largely consist of planted willows. They are often alien, introduced species or hybrids, although in some occasions native material was planted as well. Several of these introduced species are able to disperse sponta-
neously. This results in a very obscure and hard to determine origin of tidal willow vegetation. It can be spontaneous-native, spontaneous-alien, planted-alien and/or spontaneous-alien. To get an overall picture of willow diversity and its origins we studied willows morphologically in spontaneous vegetation and osiers on the fresh water tidal marshes as well as in osiers in the non-estuarine river valley.

Chronological sequences of historical maps show that osiers were planted frequently in the river valley. Until the turn of the century the area planted with willows increased; since then osiers decreased again, resulting in a very limited present-day area of osiers. Since ca. 1920 osiers were planted on tidal marshes as well; until then these “marshes” were used mainly as flood-meadows. Whether native willows from these former flood-meadows and more natural tidal marshes survived the osier plantation period is hard to detect. Given the subsequent changes in land use this is rather unlikely, but it is however possible that relict populations remained on dikes between tidal marshes. Vegetation mapping in 1992 and 1996 show a strong increase of (spontaneous) willow scrub.

Interviews with (former) osier farmers revealed a spectrum of 14 willow taxa that were used for osier plantations in the Schelde valley. Eight of these were planted on fresh water tidal marshes, all of them were used in the non-tidal valley. Until now we only discovered five of these taxa. Especially *S. x mollissima* and *S. viminalis* were encountered abundantly. The exact varieties remain to be identified.

Literature indicates that *S. alba* var. *vitellina* and *S. fragilis* var. *russelliana* were planted regularly in the 19th century. They probably correspond with the local dialect names “gele wijmen” and “oude rode”. Both are taxonomic mysteries: present-day identification keys lead to two different *S. x rubens* varieties. Literature further indicates that “Duitse rode” is synonymous with *S. x americana*, once more a taxonomic dilemma: some interpret it as a hybrid (*S. petiolaris x cordata*), others call it synonymous with *S. cordata*.

The herbaria GENT and BR revealed 5 willow taxa from the study area of which *S. x mollissima* var. *undulata* and *S. purpurea* ssp. *lambertiiana* were rediscovered in the field. It appears that *S. fragilis* var. *russelliana* is better incorporated in the *S. x rubens* complex, and should not be considered as a variety of *S. fragilis*. *S. x smithiana*, *S. pentandra* and *S. x rubra* were not yet encountered in situ.

Tidal osiers still survive locally, although in a modified form. They are harvested only once every 3 to 4 years in stead of annually. Their products are mainly used for dike consolidation works, not for basketry.
Most former tidal osiers are neglected and spontaneously develop into more naturally structured willow scrubs. These new riverine forests show many characteristics of a natural forest with the exception of the composing tree and shrub taxa, since they originate in a non-quantified way from former osier cultures. The structural diversity and rich corticolous vegetation of these open, light-rich tidal willow forests, whether composed of native-spontaneous, alien-planted or alien-spontaneous willows gives them a higher nature conservation value then well-kept osiers.

The meiofaunal meiofaun along a depth gradient in the Arctic Laptev Sea with special attention to nematode communities

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The meiofaunal meiofaun along a depth transect of oligotrophic sediments in the Arctic Laptev Sea was studied. The meiofaunal meiofaun followed the general trends reported from other studies: densities decreased with depth in relation with the more limited supply of degradable organic matter at greater depths. Although the sediments along the transect were poor in organic matter in comparison with the NE Atlantic, the densities fitted well with the meiofaunal meiofaun densities reported from the latter area. It is suggested that the meiofaunal meiofaun in the cold polar waters is adapted to this extreme environment by a rapid response to short food pulses to the sediments. Nematodes were identified up to genus level and assigned to trophic groups. A total of 32 families comprising 95 genera were found along the transect. The communities were dominated by deposit feeders whose importance increase with depth. Both TWINSPLAN and CCA analyses revealed a community shift along the depth transect: a shelf community dominated by Microlaimus and Chromadora could be distinguish-