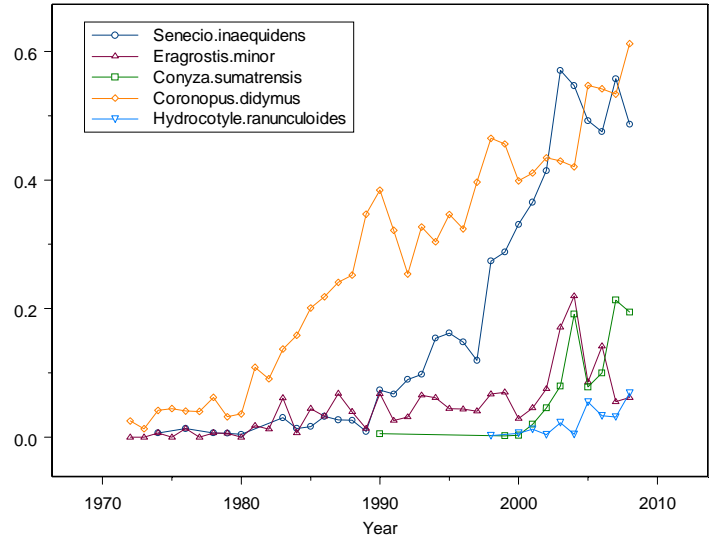


# Measuring invasive spread of alien plant species

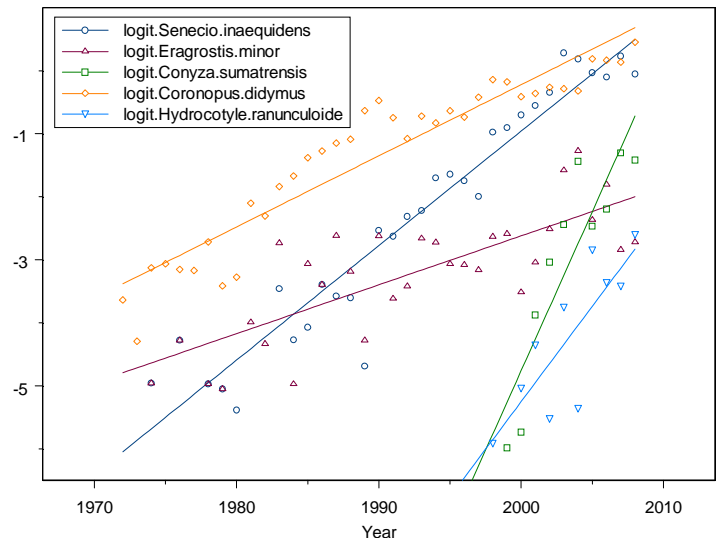
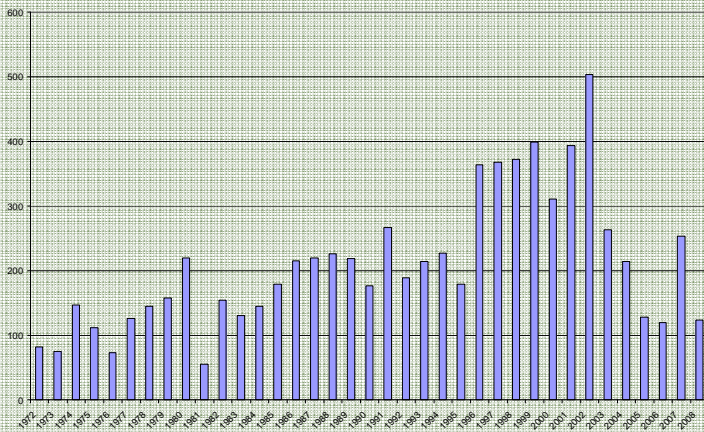
Wouter Van Landuyt - INBO

The start and spread of alien plant species in most countries is not well documented. Often alien plant species are not detected in the early start of their introduction. Once the presence of a certain alien plant species is detected they get a lot of attention resulting in numerous new records which rather reflect the recording effort rather than a real expansion of the species. To cope with this problem we used a dataset which was set up for mapping the flora of Flanders with a time scope from 1972 until 2008. Each year on average 200 grid cells of 1 km<sup>2</sup> are prospected and the field surveyors record all plant species they find in the grid cell without having special attention for certain species. By calculation the proportion of the prospected grid cell where a certain alien species was present for each year we could calculate the spread of alien species in a more objective way so we could compare the expansion of alien species with each other. This method is useful for species which are easy to recognize and are not limited to rare habitats. It also requires a wide spread of the prospected grid cells over the country or region.



Proportion of the prospected IFBL-grid cells each year in which a certain alien plant species has been found.

Prospected grid cells each year



Logit transformation of proportion of the prospected IFBL-grid cells each year in which a certain alien plant species has been found. The steepness of the line is an indication for the speed of the invasion.

