



Sveriges lantbruksuniversitet  
Swedish University of Agricultural Sciences

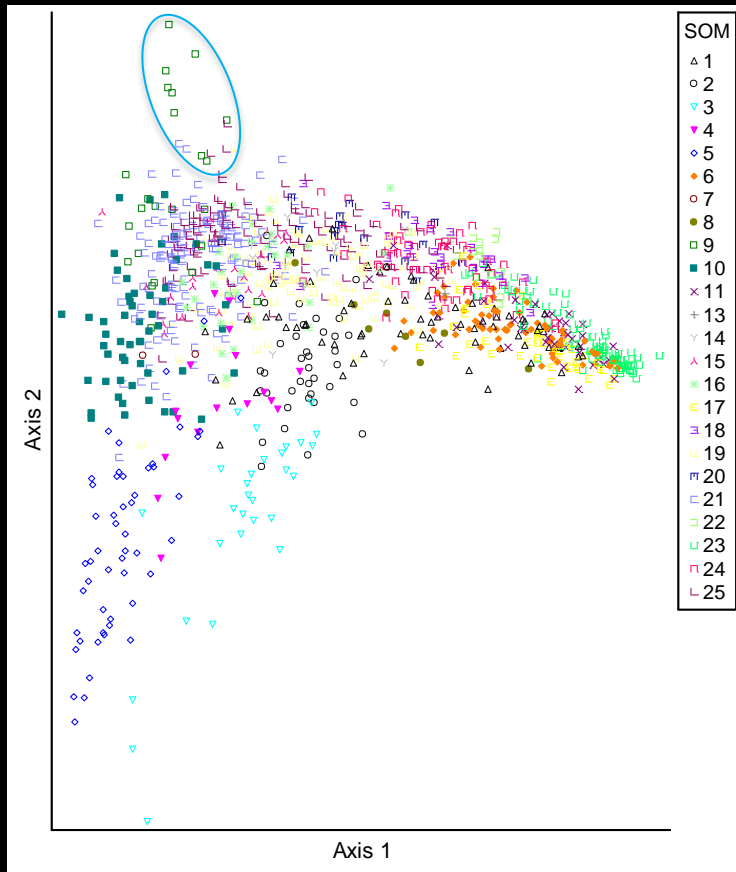


# Kiselalgs-Referenssamhällen i Sverige

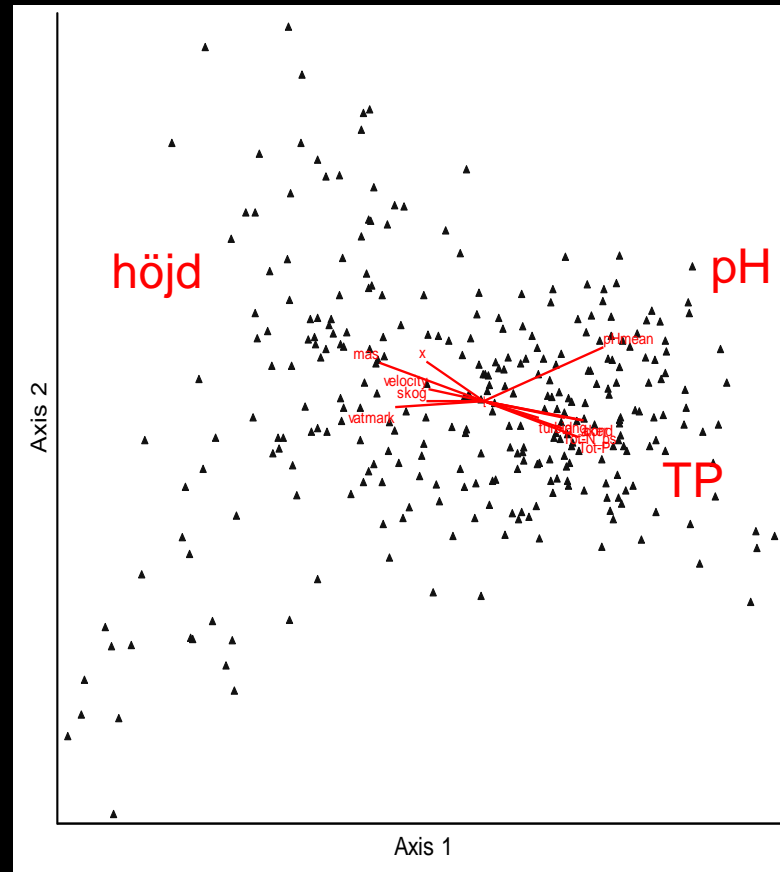
Maria Kahlert

**Insamlade data och deras  
resultat: 1124 lokaler med  
kiselalgsdata, därav ~ hälften  
med kemi och kringdata**

# Olika kiselalgssamhällen i Sverige, styrda av pH, TP och höjd

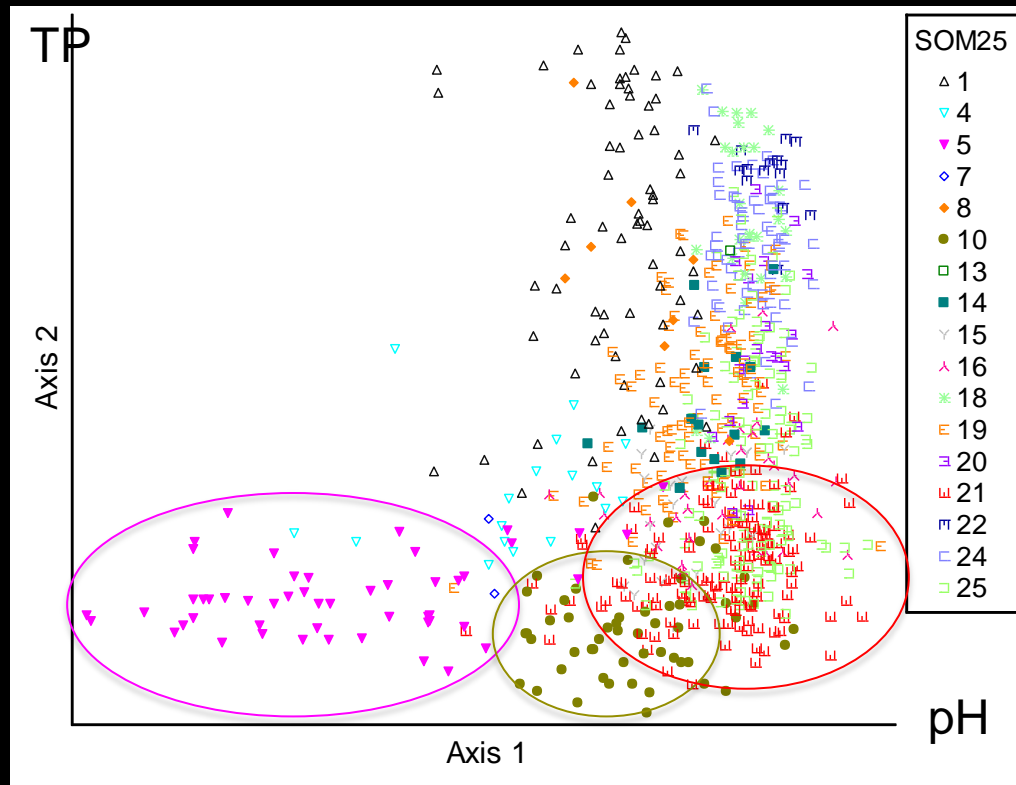


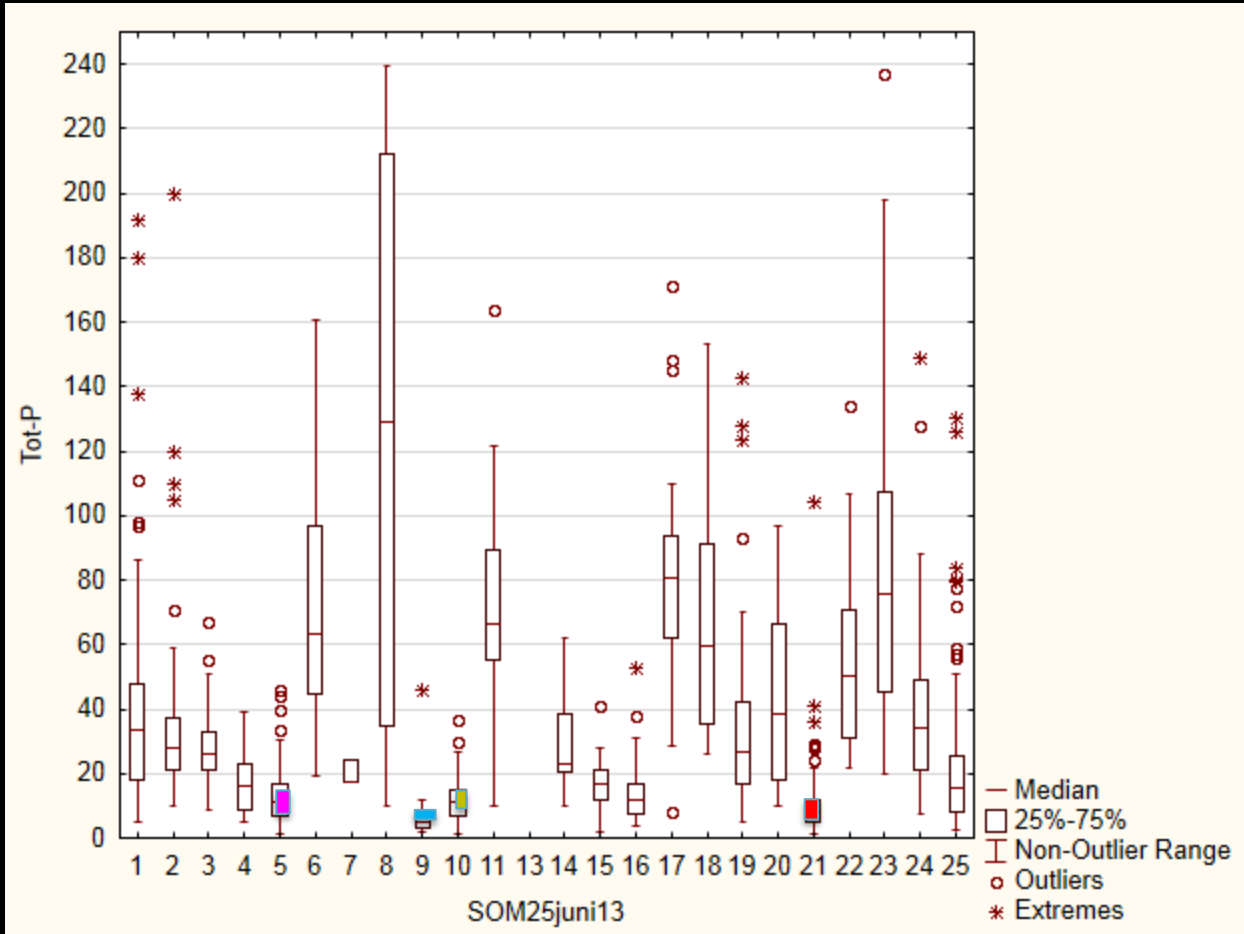
CA

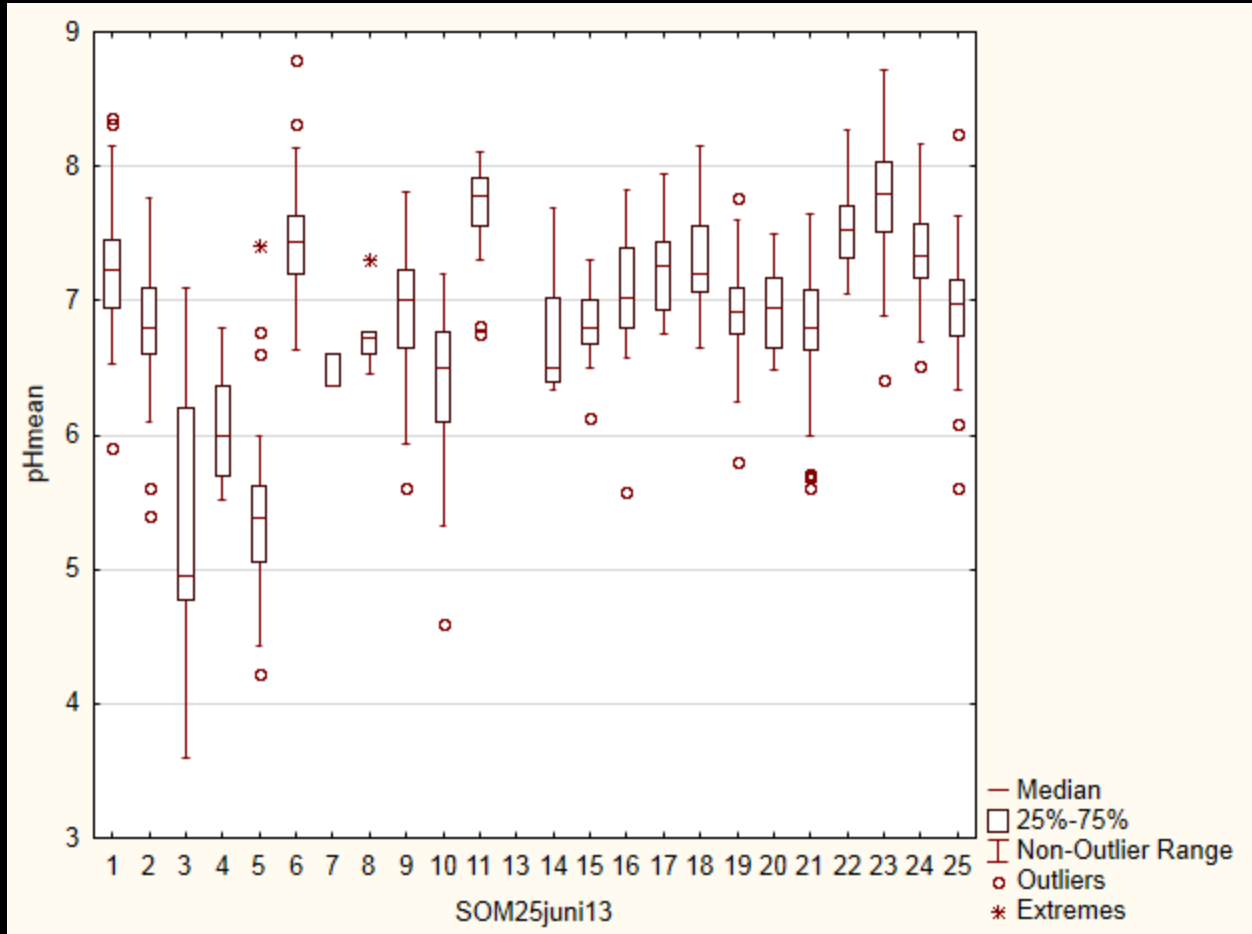


CCA

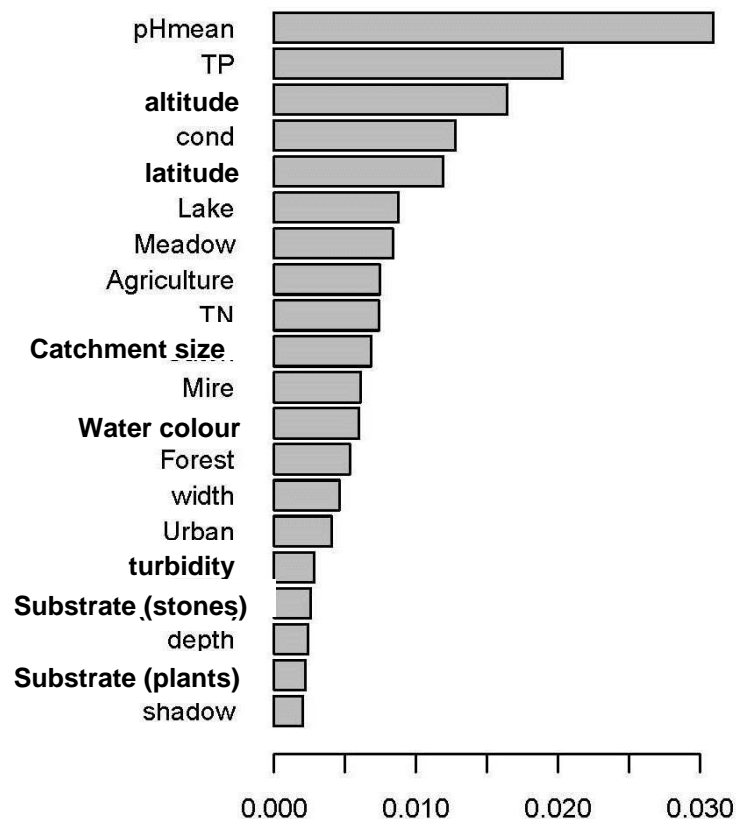
# Referenssamhällen



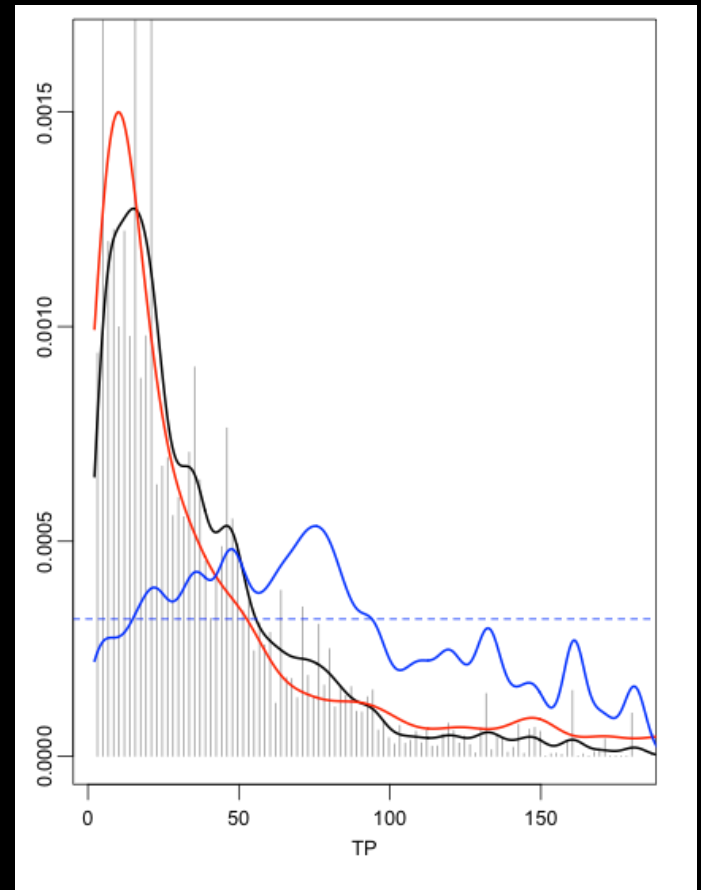
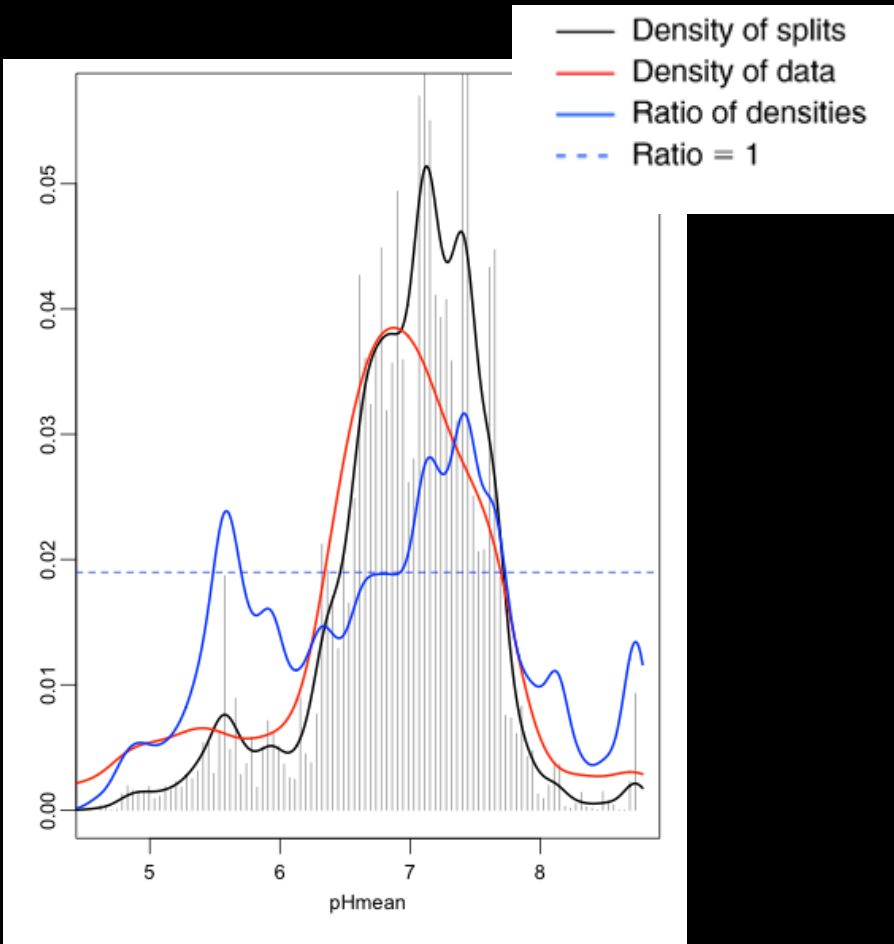




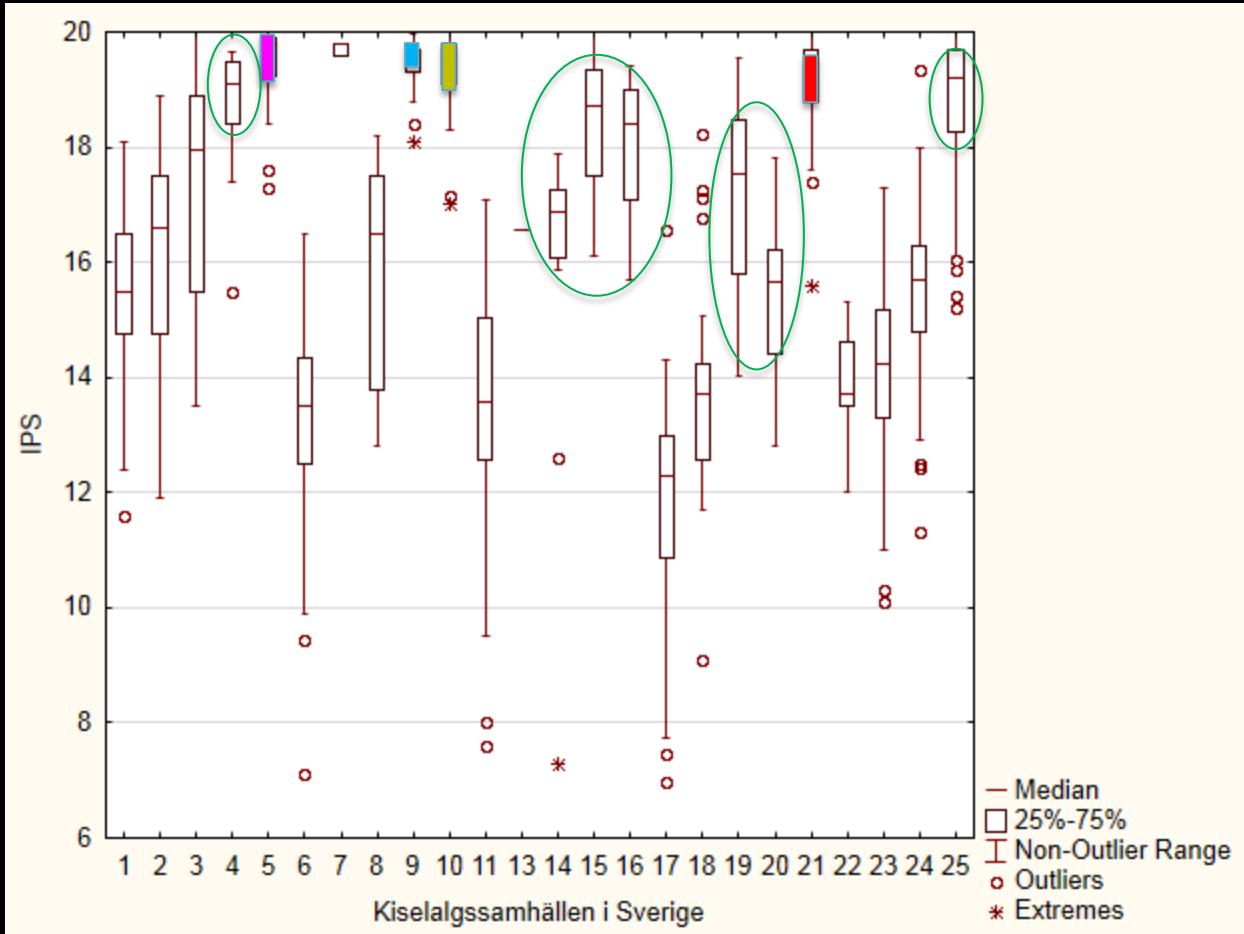
# Importance of environmental variables for predicting distributions of diatom community composition (rel. abundance)



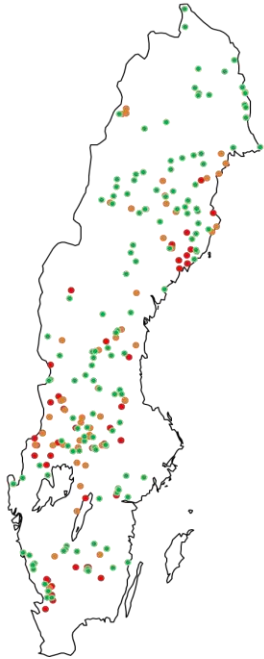
- Drivers of diatom communities' compositional changes:
- main drivers **pH, TP**
- followed by altitude, conductivity
- less important landuse factors
- least important local habitat factors



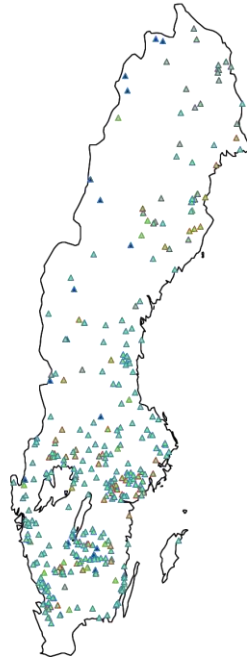




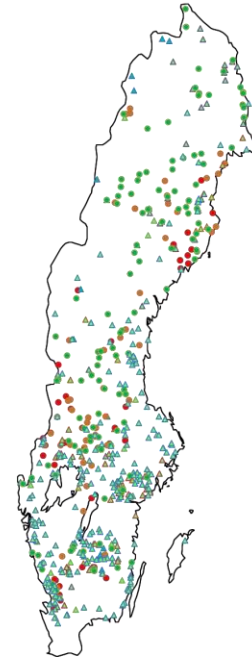
# Referenssamhällen i Sverige



Oligotrofa samhällen (10-15  $\mu\text{g TP l}^{-1}$ ), ● mycket surt, ● surt och ● neutralt



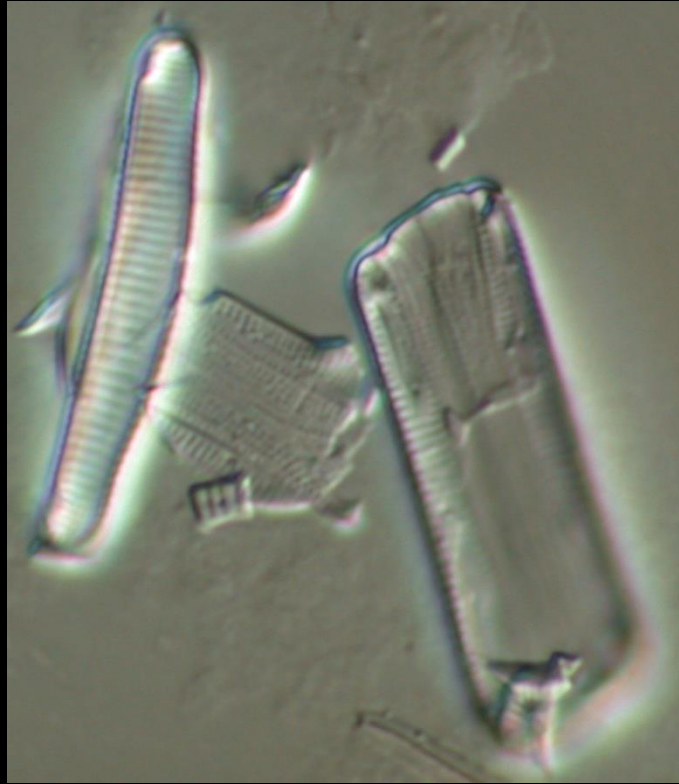
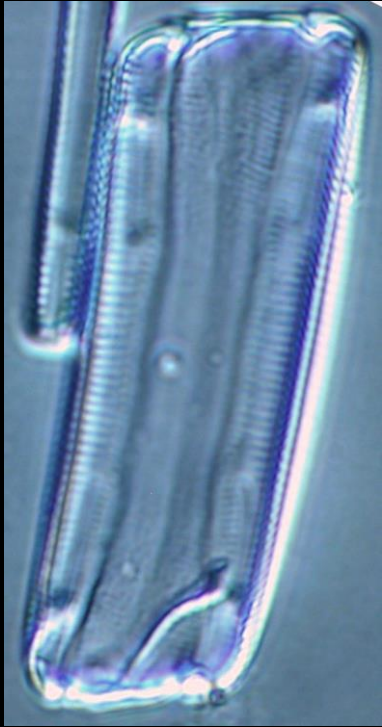
Samhällen med mera TP (17-40  $\mu\text{g TP l}^{-1}$ ), ± neutrala



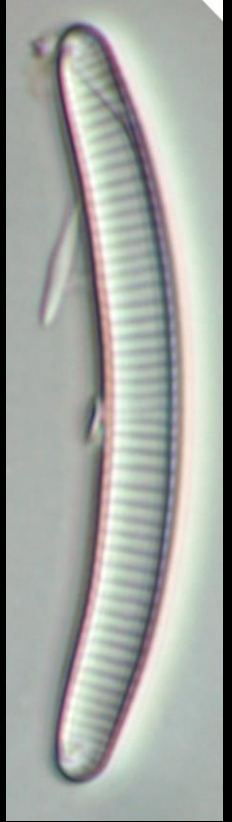
alla

# Mycket surt referenssamhälle

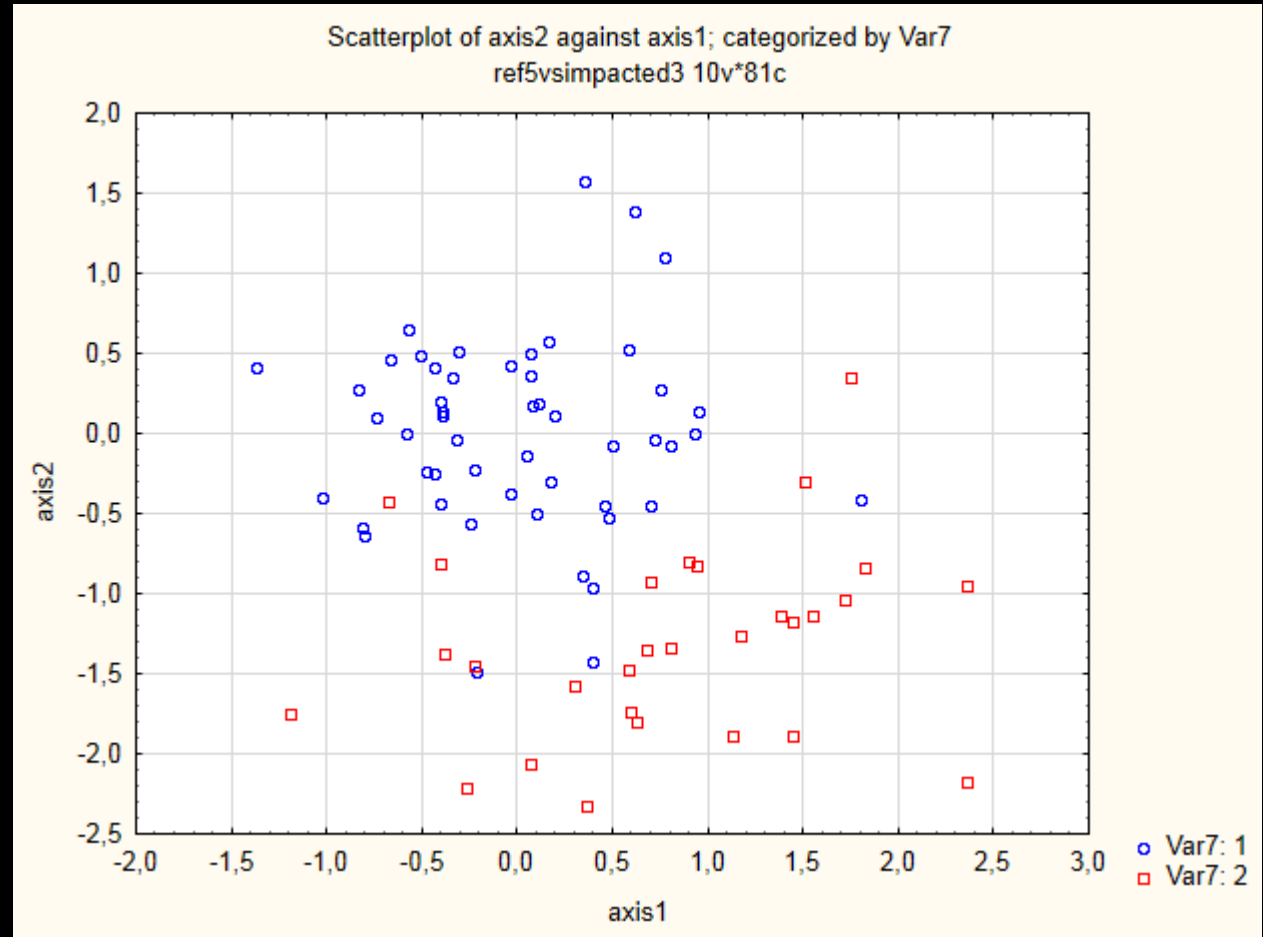
| Sammansättning (dominanta taxa) (rött = taxa typiska för samhället) | Relativ abundans (%) |
|---|----------------------|
| Tabellaria flocculosa (Roth) Kützing                                | 10,2                 |
| <b>Eunotia incisa var. incisa W. Smith &amp; W. Gregory</b>         | 23,1                 |
| <b>Eunotia rhomboidea Hustedt</b>                                   | 11,6                 |
| Eunotia implicata Nörpel, Lange-Bertalot & Alles                    | 2,49                 |
| <b>Eunotia exigua var. tenella (Grunow) Nörpel &amp; Alles</b>      | 8,38                 |
| Frustulia crassinervia (Brébisson) Lange-Bertalot & Krammer         | 2,45                 |
| Eunotia meisteri Hustedt  | 4,68                 |
| Frustulia erifuga Lange-Bertalot & Krammer                          | 2,56                 |
| Eunotia bilunaris var. bilunaris (Ehrenberg) Mills                  | 1,69                 |
| <b>Eunotia bilunaris var. mucophila Lange-Bertalot &amp; Nörpel</b> | 2,3                  |



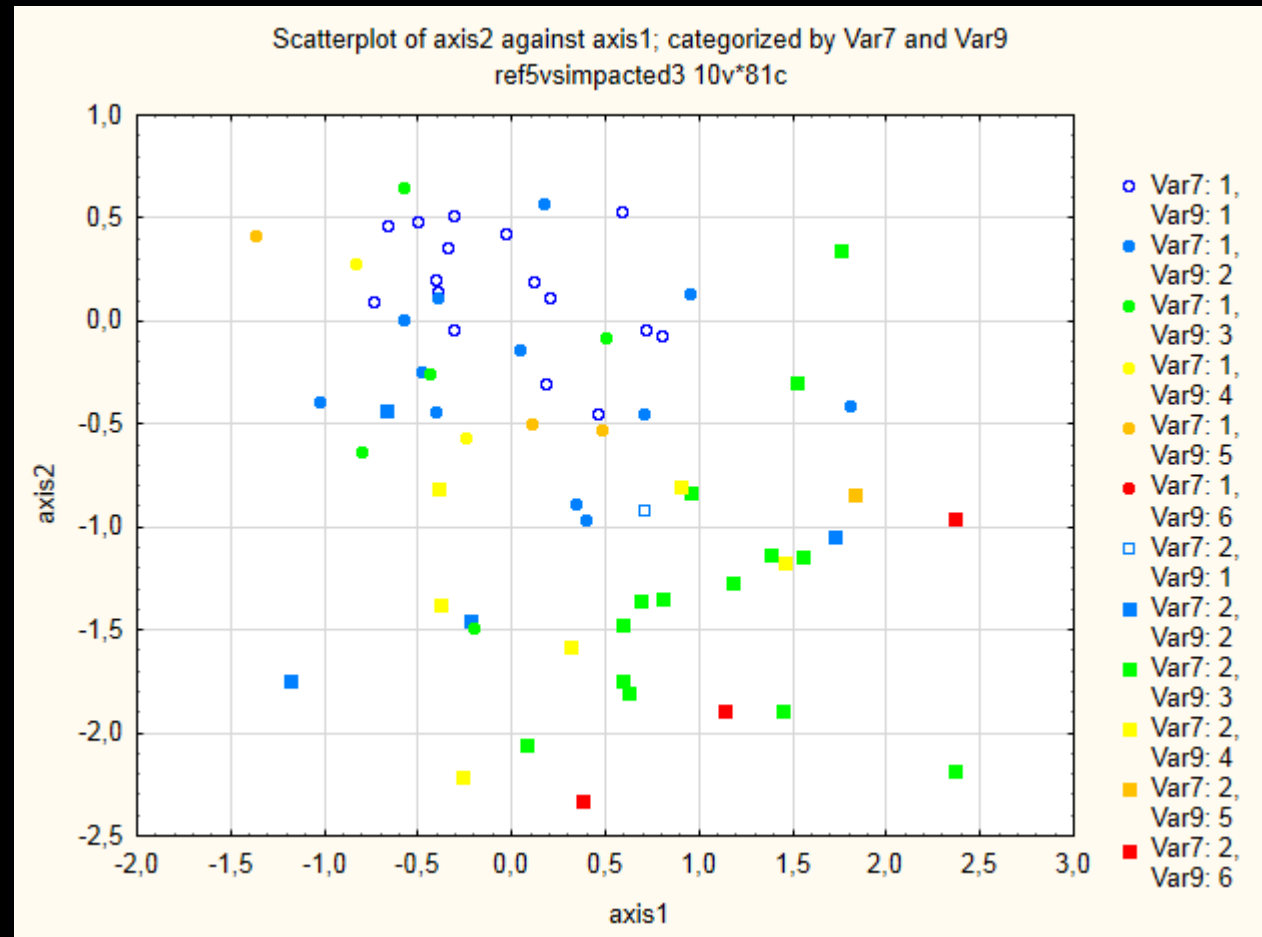
10  $\mu$ m



- mycket surt referenssamhälle, likheter mellan lokaler
- eventuellt påverkade lokaler, samhällen jämförda med referenssamhällen



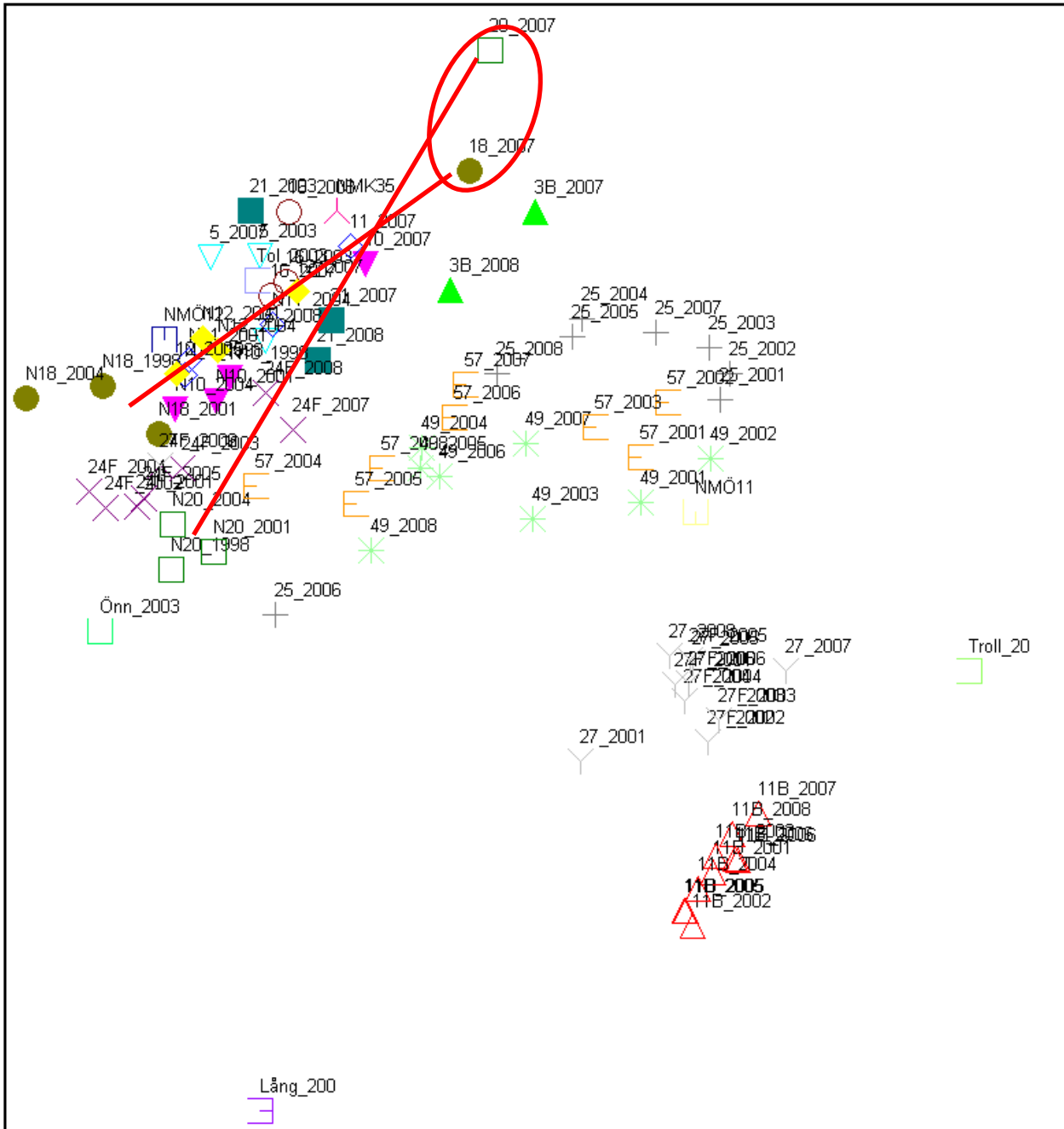
- referenssamhällen
- nya lokaler
- < 20  $\mu\text{g TP l}^{-1}$
- 20-30  $\mu\text{g TP l}^{-1}$
- 30-40  $\mu\text{g TP l}^{-1}$
- 40-50  $\mu\text{g TP l}^{-1}$
- > 50  $\mu\text{g TP l}^{-1}$







Axis 2



Axis 1





WATERS is coordinated by  Havsmiljöinstitutet  
Swedish Institute for the Marine Environment

WATERS is financed by



Hafok AB



SMHI

TOXICON AB