

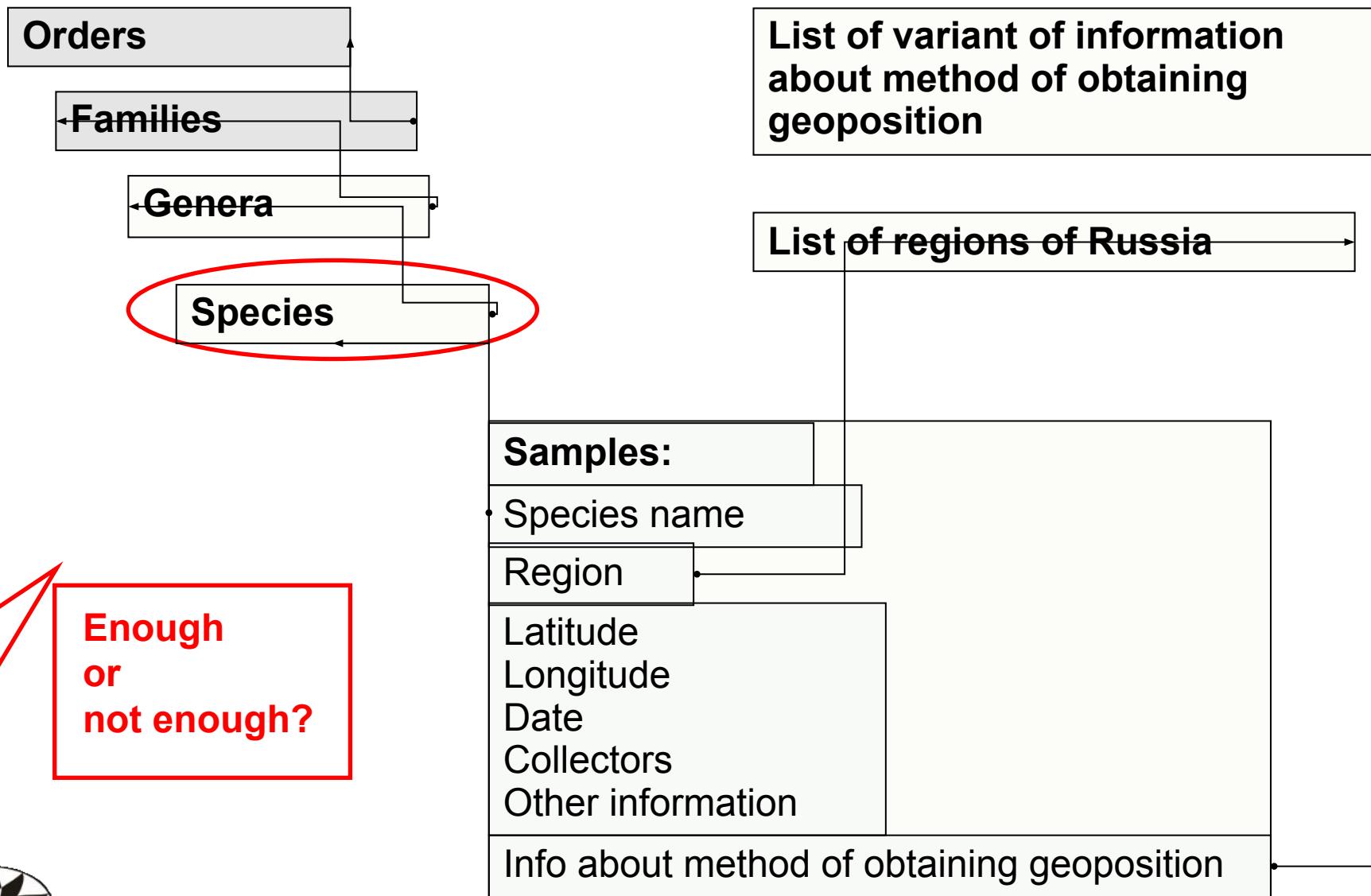
# Cryptic species. Database Representation Issues

Скрытые виды.  
Проблемы представления в базе данных



8-я конференция, посвященная памяти профессора Алексея Константиновича Скворцова  
«Скрытые виды и внутривидовое разнообразие»

# Scheme of the Flora database of mosses in Russia.



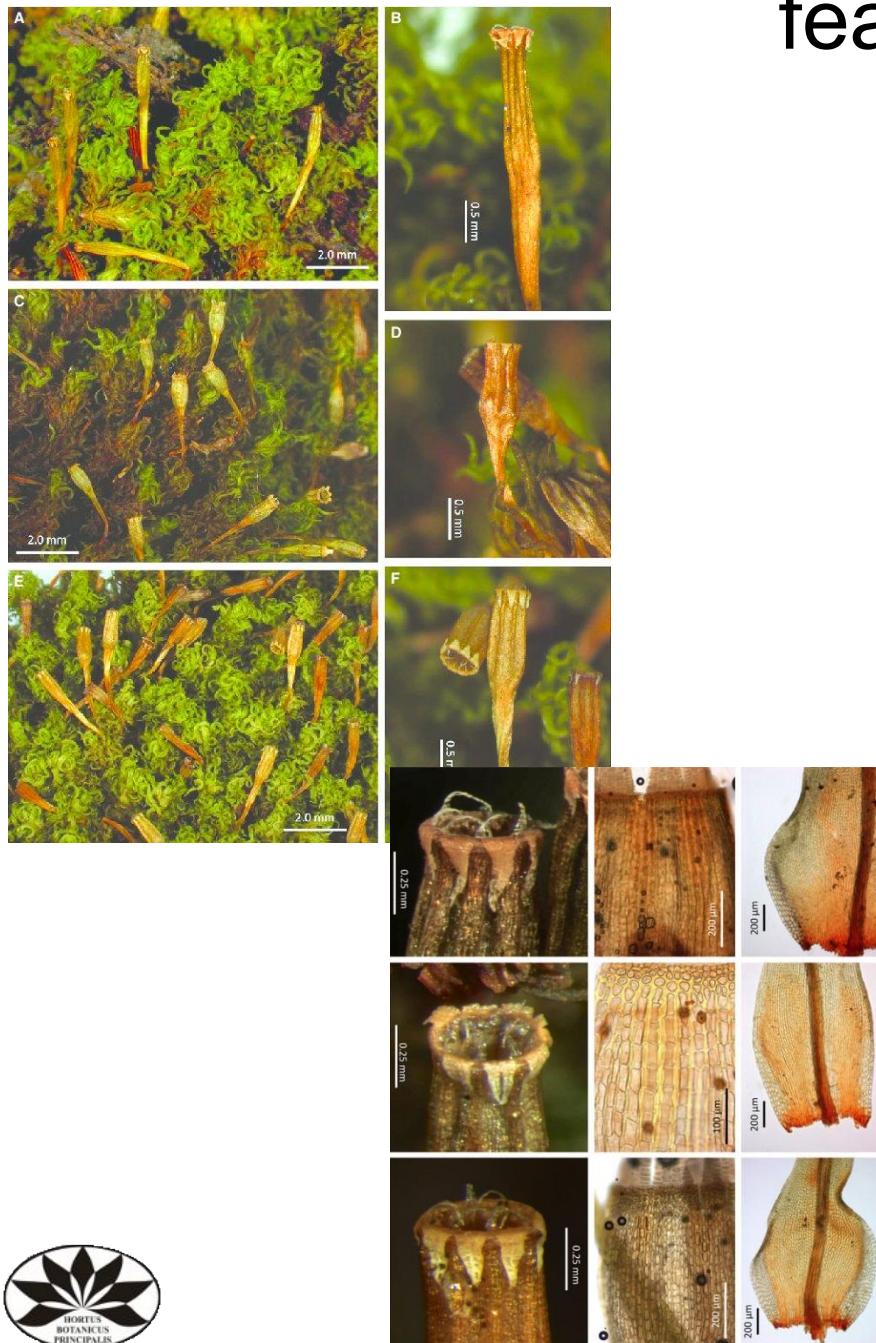


*Ulota crispa* s.l.

split to *U. crispa* s.str., *U. crispula*, *U. intermedia*  
(Caparros et al., 2016)  
differences in sporophyte characters  
impossible to identify without sporophytes



# Split into three species. Morphological features and sequence analysis

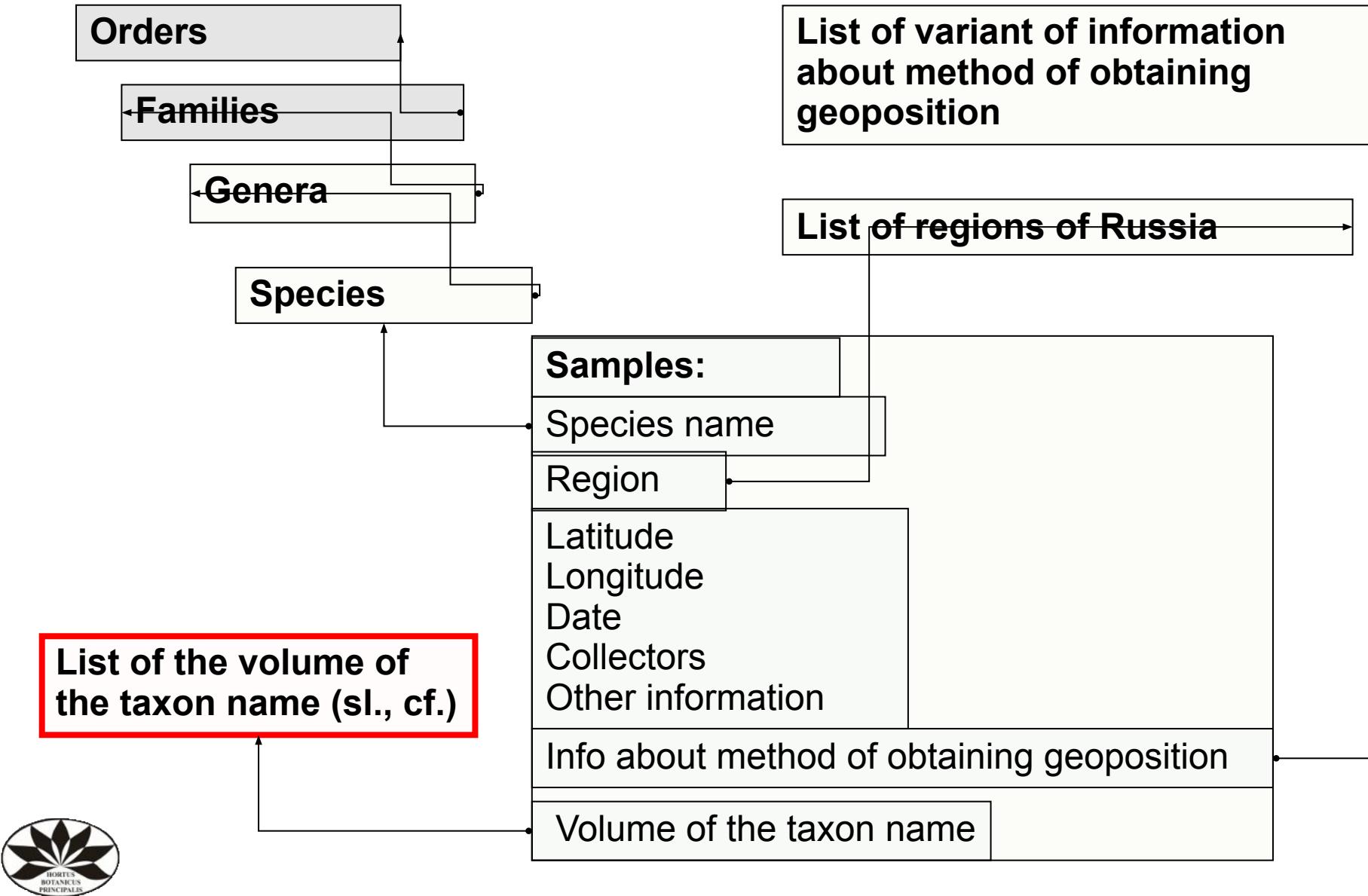


Not always possible to identify by morphology

But some difference in sequence

TTT GATGCAACTCAGATTATTTTTAGTAAATAAATTTTTATTGTTTAAGCATTTGA  
TTT GATGCAACTCAGATTATTTTTAGTAAATAAATTTTAATTTATTGTTTAAGCATTTGA  
TTT GATGCAACTCAGATTATTTTTAGTAAATAAATTTTAATTTATTGTTTAAGCATTTGA  
TTT GATGCAACTCAGATTATTTTTAGTAAACAAATTTTTATTGTTTAAGCATTTGA  
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TTT GATGCAACTCAGATTATTTTTAATAAAATAAATTTTTATTGTTTAAGCATTTGA  
TTT GATGCAACTCAGATTATTTTTAATAAAATAAATTTTTATTGTTTAAGCATTTGA

# Scheme of the Flora database of mosses in Russia.



order-family- genus- Ulota

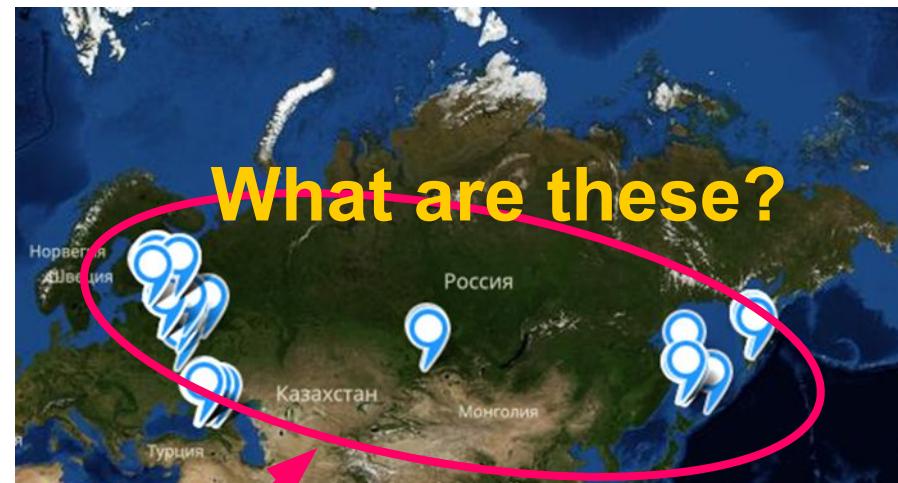
▼ species- Ulota crispa ▼

excluding sl  excluding cf

order-family- genus- Ulota

▼ species- Ulota crispa ▼

excluding sl  excluding cf



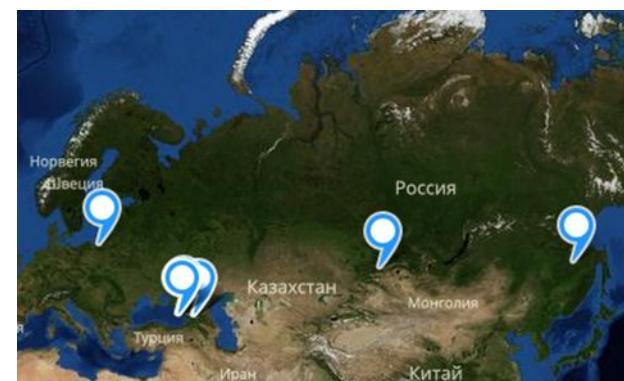
*Ulota crispa* s.l.

1) still unrevised collections  
(likely will be reidentified as  
*U. intermedia*, or partly *U.  
crispula*)

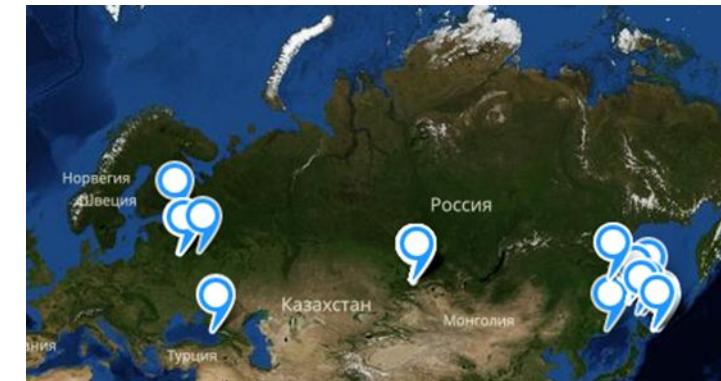
2) plants without  
sporophytes (likely will never  
be identified to species level)



*Ulota crispa* s.str.



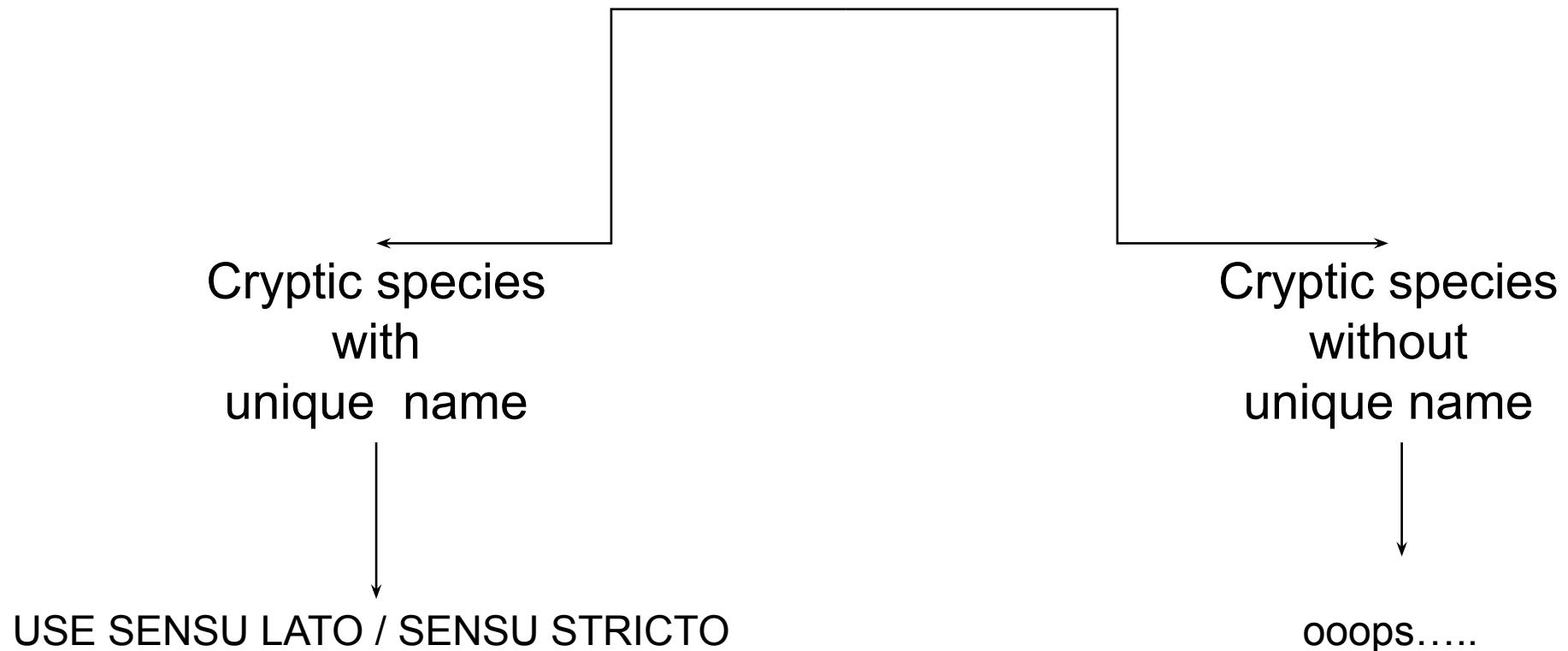
*Ulota crispula*



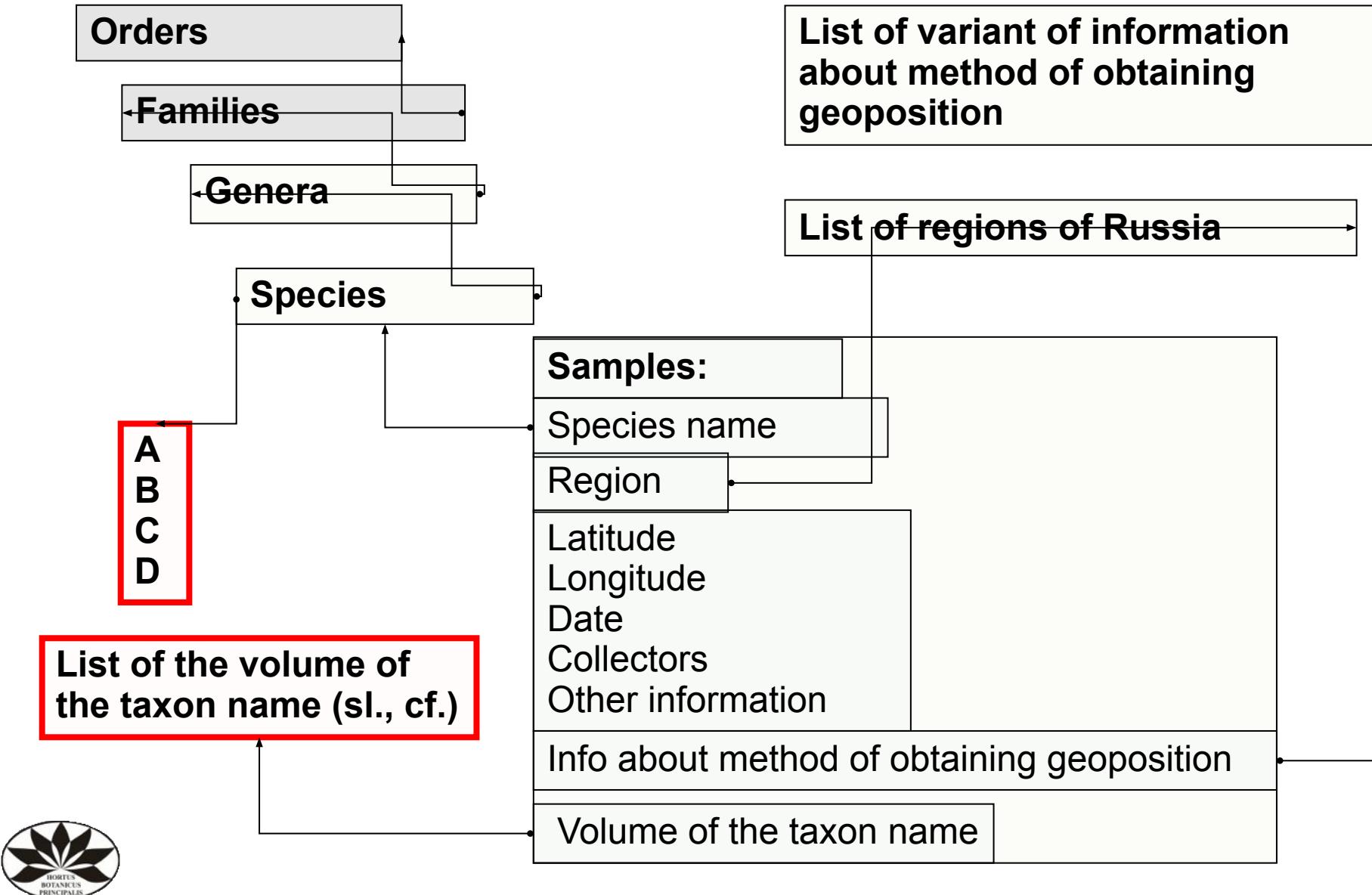
*Ulota intermedia*

Most databases include the field GEOPOSITION ACCURACY  
DO WE NEED the field IDENTIFICATION ACCURACY as well?  
If yes, the field SENSU LATO could be a variant how to approach to this

# Two different situations



# Scheme of the Flora database of mosses in Russia.



Thank you for attention!

Questions and suggestions can be sent to the email

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