

# Central European Spiders

## A Memory Game

Stano Pekár, Martina Martišová, Lenka Sentenská

The goal of this memory game is to teach players to recognise selected families of Central European spiders. The memory game includes 33 spider families out of 42 that occur in the Central Europe (Řezáč & Růžička 2024). The remaining families were not included either because they are too rare or because their identification is more difficult.


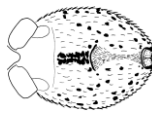




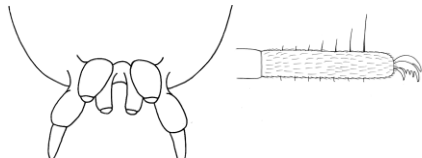
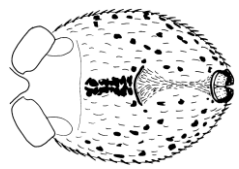
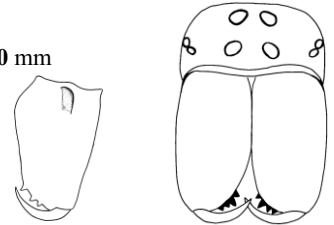
Each family is represented by two cards which are, in contrast to the classical memory game, not completely identical. They are identical only in one character – represented by a drawing. One of the twin cards bears the name of the family and the colour photograph of a species belonging to the family. The other card includes verbal description of the main morphological characters, drawings, short information about ecology, and body size. The characters were selected to be unique for a given family. The principle of the game is the same as in other memory game – to find as many twin cards as possible.

The following abbreviations were used in the text: AE – anterior eyes, AME – anterior median eyes, LE – lateral eyes, ME – median eyes, Mt – metatarsus, PE – posterior eyes, PME – posterior median eyes, TA – tarsus.

The drawings were made using the following resources: Roberts (2001), Jocqué & Dippenaar-Schoeman (2006), and Nentwig et al. (2012).

Enjoy the game!  
authors



<b>Agelenidae</b> 	<b>Anyphaenidae</b> 	<b>Araneidae</b> 
		
<ul style="list-style-type: none"> <li>• <b>2 segmented</b> posterior spinnerets longer than anterior</li> <li>• series of <b>trichobothria</b> of increasing length on Ta</li> <li>* build <b>sheet webs</b> with tubular retreat</li> </ul> <p>↔ 4.5–20 mm</p> 	<ul style="list-style-type: none"> <li>• <b>tracheal stigma</b> in the middle of abdomen</li> <li>* nocturnal <b>free-living</b> hunters, common on trees</li> </ul> <p>↔ 4–8 mm</p> 	<ul style="list-style-type: none"> <li>• height of <b>clypeus</b> = diameter of AE (cf. Linyphiidae)</li> <li>• chelicerae often with <b>condylus</b></li> <li>• legs with <b>strong spines</b></li> <li>* build vertical <b>orb webs</b> with a sticky spiral</li> </ul> <p>↔ 2–20 mm</p> 

## References

- Jocqué R. & Dippenaar-Schoeman A.S. 2006. Spider Families of the World. Royal Museum for Central Africa, Tervuren.
- Nentwig W., Blick T., Gloor D., Hänggi A. & Kropf C. 2012. Araneae: Spiders of Europe. URL: <http://www.araneae.unibe.ch/>
- Řezáč M. & Růžička V. 2024. An updated checklist of spiders of Czechia. Online at <https://www.arachnology.cz/checklist-of-spiders-of-Czechia-26.html>.
- Roberts M.J. 2001. The Spiders of Britain and Northern Europe. Harper Collins Publishers, London.

## Glossary

clypeus – area between anterior carapace margin and the eye field  
procurved – bent forward  
prograde – pointing forward  
recurved – bent backward

© 2024 Stano Pekár, Martina Martišová, Lenka Sentenská  
Photographs © Rudolf Macek  
Illustrations © Lenka Sentenská, Stano Pekár  
Design © Stano Pekár  
© 2024 Masaryk University  
2nd edition

English proofreading Matthew Nichols

Printer: Tiskárna KNOPP, Nádražní 219  
549 01 Nové Město nad Metují

**muni**  
**PRESS**

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

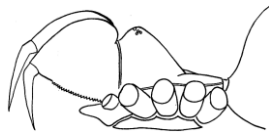


## Atypidae



- massive **orthognath** chelicerae (as long as the carapace)
- \* live inside closed tube-like **burrows** in the ground

↔ 7–15 mm

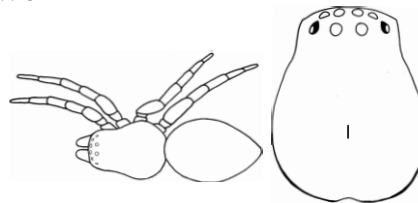


## Clubionidae



- width of eye field = **half** of largest width of prosoma
- legs **short** and **stout**, of similar length (cf. Cheiracanthiidae)
- \* nocturnal free-living plant-dwellers

↔ 3–11 mm

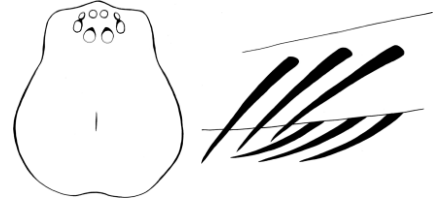


## Phrurolithidae



- width of eye field < **half** of largest width of prosoma (cf. Clubionidae)
- Mt I+II with long ventral **bristles**
- \* diurnal free-living ground-dwellers

↔ 3–10 mm

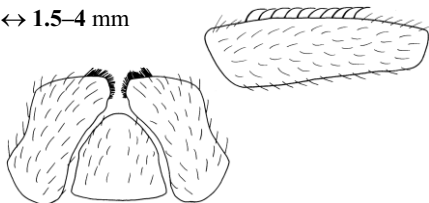


## Dictynidae



- ♀ **calamistrum** in one row
- **gnathocoxae** enclosing labium (cf. Titanoecidae)
- \* build tangled **cribellate** webs on vegetation

↔ 1.5–4 mm

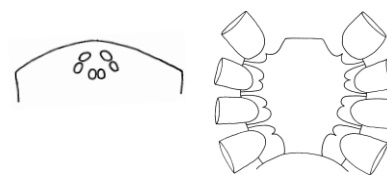


## Dysderidae

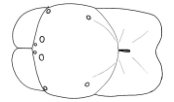


- 6 eyes arranged in a circle
- sternum with **intercoxal** sclerites
- chelicerae may be porrect
- \* nocturnal **free-living** ground-dwellers

↔ 5–15 mm

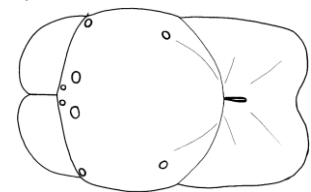


## Eresidae



- 8 **small** eyes, ME close together, LE at corners of prosoma
- carapace **rectangular**
- \* build **tangled webs** with tubular retreat in the ground

↔ 3–20 mm



ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE



## Gnaphosidae



- anterior **spinnerets cylindrical**, longer than others
- 8 small eyes in 2 rows, **PME oval**
- \* **nocturnal** free-living ground-dwellers

↔ 2–18 mm

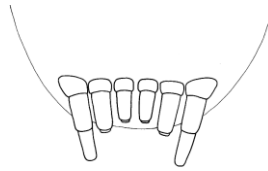


## Hahniidae

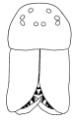


- all spinnerets arranged in a **transverse row**
- 8 eyes in 2 rows
- \* build small **sheet webs** on ground

↔ 1.5–3 mm

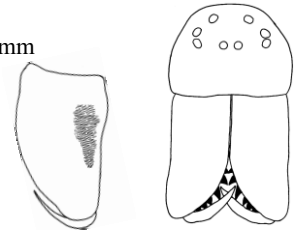


## Linyphiidae



- height of **clypeus** > 2x diameter of AE (cf. Araneidae)
- chelicerae often with **stridulating ridges**
- \* build **sheet webs** on ground and in foliage

↔ 0.8–7 mm

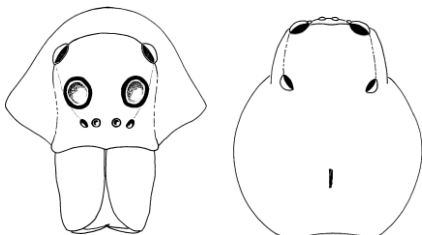


## Lycosidae



- 8 eyes in 3 rows, **PME largest**, PE arranged in a square
- \* **free-living** ground-dwellers

↔ 3–30 mm

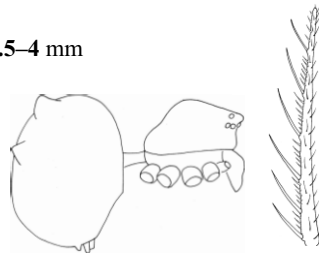


## Mimetidae



- Mt I, II and Ta I, II with series of prominent **spines**
- 1 to 3 pairs of small **tubercles** on abdomen
- \* free-living on foliage, araneophagic

↔ 2.5–4 mm

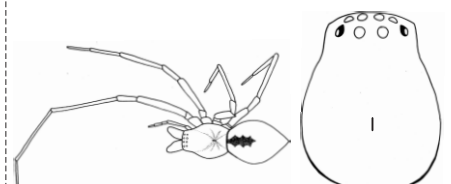


## Cheiracanthiidae



- width of **eye field** = half of largest width of prosoma
- **legs long**, leg I considerably longer than leg II (cf. Clubionidae)
- \* **nocturnal** free-living plant-dwellers

↔ 5–15 mm



ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

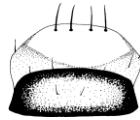
ARANEAE

ARANEAE

ARANEAE

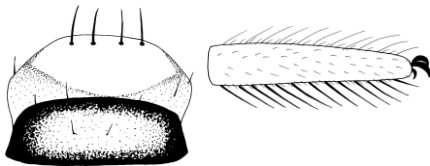


### Nesticidae

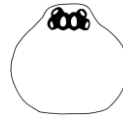


- labium with front **margin swollen** (cf. Theridiidae)
- legs with few or no spines, **bristles** on Ta IV
- \* build **tangled webs** in dark places

↔ 2–6 mm

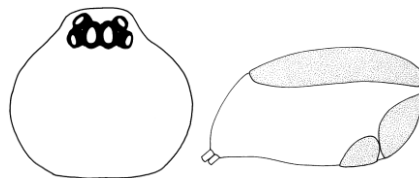


### Oonopidae



- **6 eyes** arranged in a compact group
- abdomen often with **scuta**
- \* free-living ground-dwellers, mostly synanthropic

↔ < 2 mm



### Oxyopidae



- 8 eyes in 4 rows, **hexagonal eye field**
- all legs with very **long spines**
- \* diurnal free-living **plant-dwellers**

↔ 5–10 mm

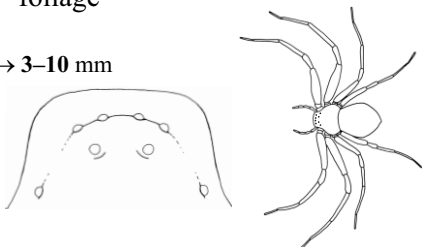


### Philodromidae



- 8 eyes, similar in size, row of PE **recurved**
- legs long, **prograde**, legs II usually longer than others
- \* **free-living** hunters common on foliage

↔ 3–10 mm



### Pholcidae



- 6 of 8 eyes arranged in **2 triads**, AME much smaller than others
- very long and **slender legs**
- \* build **tangled webs**, mostly synanthropic

↔ 2–10 mm

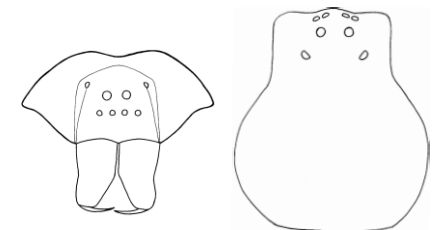


### Pisauridae



- 8 eyes in **3 rows**, of similar size, PE arranged in a **trapezoid**
- \* diurnal free-living on low vegetation or water surface

↔ 9–20 mm



ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE



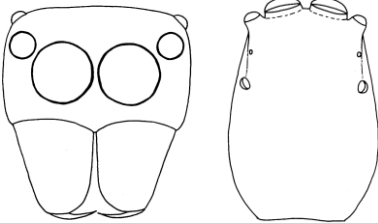


## Salticidae



- 8 eyes in 3 rows, **AME largest**, quadrangular eye field
- \* diurnal free-living **jumping** hunters in canopy and on ground

↔ 2–12 mm

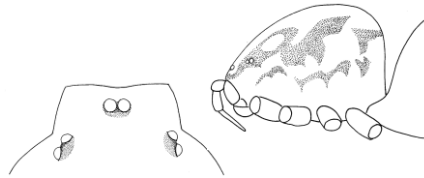


## Scytodidae



- 6 eyes in 3 separated groups of 2
- carapace very **domed**
- \* nocturnal free-living hunters, **spray gum** and poison from chelicerae, synanthropic

↔ 3–6 mm

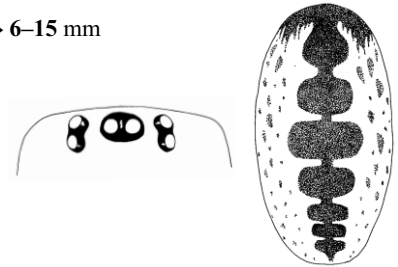


## Segestriidae

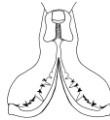


- 6 eyes in 3 groups of 2
- abdomen with a clear dark **pattern**
- \* build **tubular webs** with radiating silk in walls or barks

↔ 6–15 mm

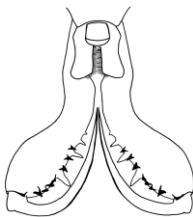


## Tetragnathidae



- **maxillae** much longer than wide
- chelicerae often long and **massive**
- \* build **orb webs** with open hub

↔ 2.5–15 mm



## Theridiidae



- legs with few or no spines, **serrated** bristles on Ta IV
- labium with the **margin** NOT swollen (cf. Nesticidae)
- \* build **tangled webs** in vegetation

↔ 1.5–13 mm

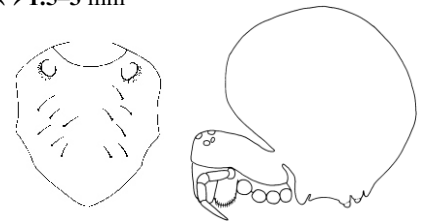


## Theridiosomatidae



- sternum with two **depressions**
- globular abdomen
- \* build small horizontal **orb webs**, inverted umbrella-like

↔ 1.5–3 mm



ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

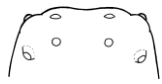
ARANEAE

ARANEAE

ARANEAE

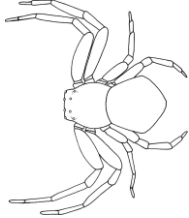
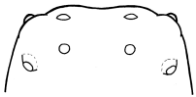


## Thomisidae



- row of **PE recurved**, LE usually larger than others
- strong front legs (I, II), longer than others, **crab-like**
- \* diurnal free-living, **ambushing** mainly on foliage

↔ 2–11 mm

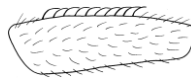
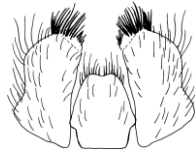


## Titanoecidae



- ♀ **calamistrum** in one row
- gnathocoxae parallel with labium (cf. Dictynidae)
- \* build tangled **cribellate webs** under stones

↔ 3–7 mm

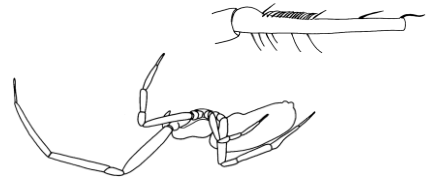


## Uloboridae

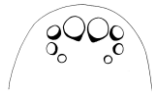


- legs I and IV longer than others
- Mt IV **curved** with calamistrum
- \* build horizontal **orb webs** or triangular webs with cribellate silk

↔ 3–6 mm

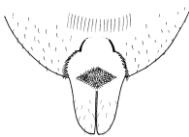
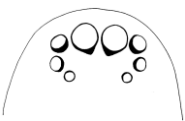


## Zodariidae

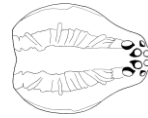


- 8 eyes arranged in **heart-like** shape
- **anterior spinnerets** much larger than others
- \* free-living ground-dwellers, **myrmecophagous**

↔ 1.6–5 mm

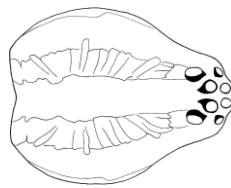


## Miturgidae



- 8 eyes **closely grouped**
- carapace pale yellowish with pair of longitudinal **brown bands**
- \* diurnal free-living ground-dwellers

↔ 4–6.5 mm

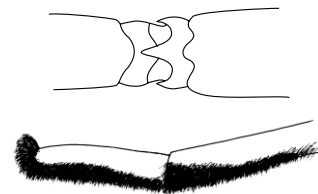


## Sparassidae



- Mt and Ta of all legs with **scopulae**
- apex of Mt with trilobate **membrane**
- \* diurnal free-living plant-dweller

↔ 7–17 mm



ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE

ARANEAE