**Dikerogammarus villosus**

<table>
<thead>
<tr>
<th>Taxon</th>
<th>Family / Order / Class / Phylum</th>
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</thead>
<tbody>
<tr>
<td><em>Dikerogammarus villosus</em> (Sowinsky, 1894)</td>
<td>Gammaridae / Amphipoda / Crustacea / Arthropoda</td>
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</tbody>
</table>

**COMMON NAMES (English only)**
Killer shrimp

**SYNONYMS**

**SHORT DESCRIPTION**
The killer shrimp is an omnivorous predator. It can feed on a variety of macroinvertebrates, including other gammarid species, and exhibits an important biotic potential and ecological plasticity.

**BIOLOGY/ECOLOGY**

**Dispersal mechanisms**
Unknown, probably through shipping activity

**Reproduction**
The females are sexually mature at 6 mm in length, when they reach 4 to 8 weeks old. They can reproduce when water temperature is above 13°C, with a mean fecundity of 27.3 eggs per female. Hatching length is about 1.8 mm.

**Known predators/herbivores**
Several fish species feed on this shrimp, but no invertebrate species is known to predate it.

**Resistant stages (seeds, spores etc.)**
None.

**HABITAT**

**Native (EUNIS codes)**

**Habitat occupied in invaded range (EUNIS codes)**

**Habitat requirements**
The species exhibits a wide range of environmental tolerance. It can live in a broad spectrum of temperatures (0 to 30 °C) and salinity (up to 12‰), and can occupy every substratum except sand. The species is only present in areas with low current velocity.

**DISTRIBUTION**

**Native Range**
Ponto-caspian basin

**Known Introduced Range**
Almost all Western Europe large rivers (Rhône, Loire, Seine, Moselle, Meuse, Rhine, Main, Danube) and Baltic Sea basin
**Trend**
Spreading.

**MAP (European distribution)**

**INTRODUCTION PATHWAY**
The most likely introduction vector is shipping (ballast water and hull fouling of vessels). The colonisation of western European hydrosystems probably occurred through the southern corridor, via the Danube and Rhine Rivers

**IMPACT**
**Ecosystem Impact**
It locally eliminates other gammarid species through competition and predation. There have been some observations of the species eating fish eggs or attacking small fishes.

**Health and Social Impact**
Unknown.

**Economic Impact**
Unknown.

**MANAGEMENT**
**Prevention**
Ballast water treatment for transcontinental dispersion. No effective solution has been proposed for intracontinental dispersion.

**Mechanical**
Unknown.

**Chemical**
Unknown.

**Biological**
Unknown. Biotic control (by parasites and/or predator species) remain poorly documented.

**REFERENCES**


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