

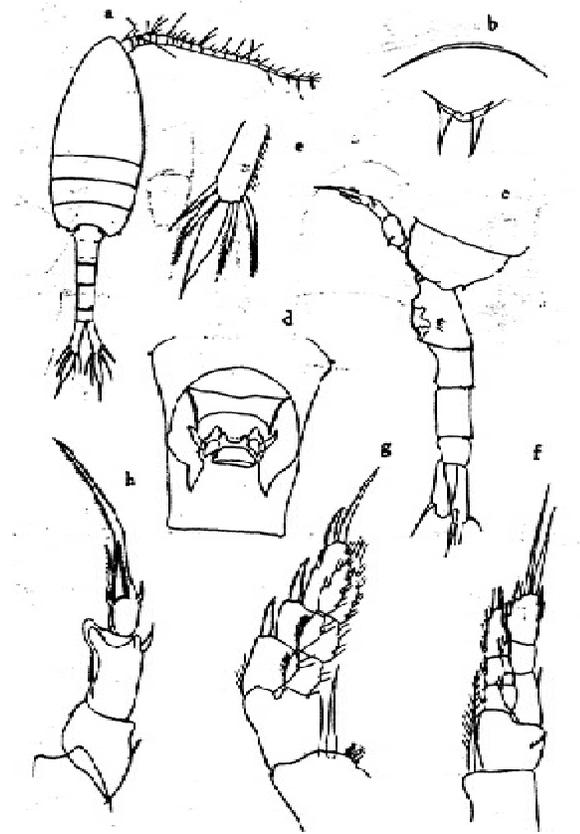


Pseudodiaptomus inopinus

Asian copepod, holoplanktonic cladoceran

Threat scores

1. Ecological impact
 - “Not only invaded the Columbia River estuary, but subsequently, at least 7 other estuaries in the Pacific Northwest (Washington and Oregon states) region and was sometimes found to be the dominant and most abundant zooplankton in these systems. Found in estuaries with, and without international shipping” (Molnar 2008).
2. Invasive potential
 - “Two factors may be important in the establishment of this copepod: temperature and extent of salinity intrusion. They were found to be more abundant in rivers with average autumn temperatures of 19.3 C than in those with average autumn temps of 12.4 C. Populations were found in rivers with and without international shipping ports. Ballast dumping often occurs in these ports” (Molnar 2008).
3. Geographic extent
 - Locally patchy
4. Management difficulty
 - No known eradication controls for this invader.



Geography and Habitat

1. Origin: Asia
2. First introduction: 1990
3. Became established & abundant in Columbia River estuary (Pacific Northwest US) between 1980 - 1990.
4. Additional intrusions may be via bilges or holds of smaller vessels or dispersal by winter or spring flooding into offshore waters.
5. Marine, estuaries/bays, lakes
6. Occurs in freshwater lakes in native Asian range.

Invasion Pathways

1. Stowaways in Holds
 - Accidental possible
 - Cause- recreational boat relocation
 - Intrusions may be via bilges or holds of smaller vessels
2. Ballast &/or Fouling
 - Accidental probable
 - Invasion of Columbia River estuary 'probably via introduction by ballast water dumping (Cordell et al. 1992)
3. Natural Spread
 - Possible
 - Intrusions may be via dispersal by winter or spring flooding into offshore waters.

Non Native locations

1. 57- OR, WA, Vancouver Coast and Shelf

Sources

1. Molnar, Jennifer, et al. 2008. "Assessing the global threat of invasive species to marine biodiversity." *Frontiers in Ecology and the Environment*. 6 (9), pp. 485-492.
2. <http://conserveonline.org/workspaces/global.invasive.assessment>
3. <http://copepodes.obs-banyuls.fr/en/fichesp.php?sp=2313>