Cancrocaeca xenomorpha, commonly called False Spider Cave Crab, is a recent genus and species described under Hymenosomatidae, a family of small-sized and round-bodied crabs with very flat carapace, which includes about a hundred mainly marine species. C. xenomorpha, the first cave representative of the Hymenosomatidae family, was then only known to live in small populations in two caves of the Maros Karst in Indonesia. But during the expedition of some staff of the ASEAN Regional Centre for Biodiversity Conservation to the Maros Karst in August 2001, the species was discovered in a third cave, near Samanggi. The species belongs to the order Decapoda under the Crustacean Order.

Its body length is about 5 mm and its colour, whitish or light brown. With its quite long and slender legs, it looks like a spider crab. The species has the most extreme reduction of eyes: complete loss of any ocular structure, including the orbit, which does not exist even in the hydrothermal/abyssal blind crabs. As such, it is the most highly cave-adapted species of crab known in the world.

C. xenomorpha is considered as a most remarkable stygobitic species of the Maros Karst (“Stygobitic” is defined as inhabiting only subterranean water). C. xenomorpha is present in subterranean streams that do not originate from sinks of outside rivers, or that have been filtered by large boulders. As for most cave invertebrates, its biology is totally unknown. The small number of large spherical eggs observed in females suggests that its larval development is probably of the abbreviated type, perhaps direct.

The species is vulnerable given its restricted distribution and its narrow habitat, but not threatened because underground waters of the area are not polluted.

By L. Deharveng, D. Guinot and P.K.L.
(Note: L. Derharveng is the EU collaborator for the ARCBC Project Research entitled, “The Effect of Human Impact on Cave and Karst Biodiversity: Indonesia component”)