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The distribution of the subspecies of *Jaera albifrons* Leach (Crustacea, Isopoda, Asellota) in the Netherlands

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ABSTRACT

Two subspecies, *syei* and *ischioetosa*, of *Jaera albifrons* are recorded from the Netherlands. A list of localities is given. A presumed hybrid between these two subspecies is signalized.

The species *Jaera albifrons* Leach, 1814, has been divided into six subspecies by Forsman (1949) and Bocquet (1950), viz.:

Jaera albifrons albifrons Leach, 1814,
Jaera albifrons ischioetosa Forsman, 1949,
Jaera albifrons posthirsuta Forsman, 1949,
Jaera albifrons prae-hirsuta Forsman, 1949,
Jaera albifrons syei Bocquet, 1950,
Jaera albifrons forsmanni Bocquet, 1950.

These subspecies can only be identified through the secondary sexual characters in the pereopodes of the males (Forsman 1944, 1949; Bocquet 1950, 1953; Gruner 1965).

Since it had not yet been ascertained which of these six subspecies occur or occurred in the Netherlands, and where, the present survey was made.

The material examined was collected between the years 1925 and 1965. It is preserved in the collections of the Rijksmuseum van Natuurlijke Historie, Leiden, the Afdeling Delta Onderzoek van het Hydrobiologisch Instituut van de Koninklijke Nederlandse Akademie van Wetenschappen, Yerseke and the Zoölogisch Museum van de Universiteit van Amsterdam.

It was found that only *J. albifrons ischioetosa* and *J. albifrons syei* occur in the Netherlands. Of these, *J. albifrons syei* lives generally in brackish waters with a higher chlorinity than *J. albifrons ischioetosa*. This preference manifested itself when Dutch sea-arms were closed. *J. albifrons ischioetosa*

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penetrated into the Zuyderzee (now IJsselmeer) and the Veersche Gat (now Veersche Meer) as the chlorinity dropped, whereas only *J. albifrons syei* was found there before these waters were cut off from the sea.

At the moment the following localities can be mentioned for each of the two subspecies (see figures 1 and 2). In localities where the environment has undergone great changes in recent years, owing to diking work or land reclamation, the date of collecting is mentioned in parentheses.

***Jaera albifrons ischiosetosa* Forsman, 1949**

"Kolk" near Blokzijl (1938), Urk (20.VII.1932), "Braken" behind the "Hondsbossche Zeewering" (sea-wall), IJmuiden, Den Bommel, Stad aan 't Haringvliet. "Inlagen" in Schouwen-Duiveland, Plompvoren (Burghsluis), Serooskerke (Schouwen-Duiveland), Zierikzee, Ouwerkerk, Veersche Meer (1964) and Ritthem.

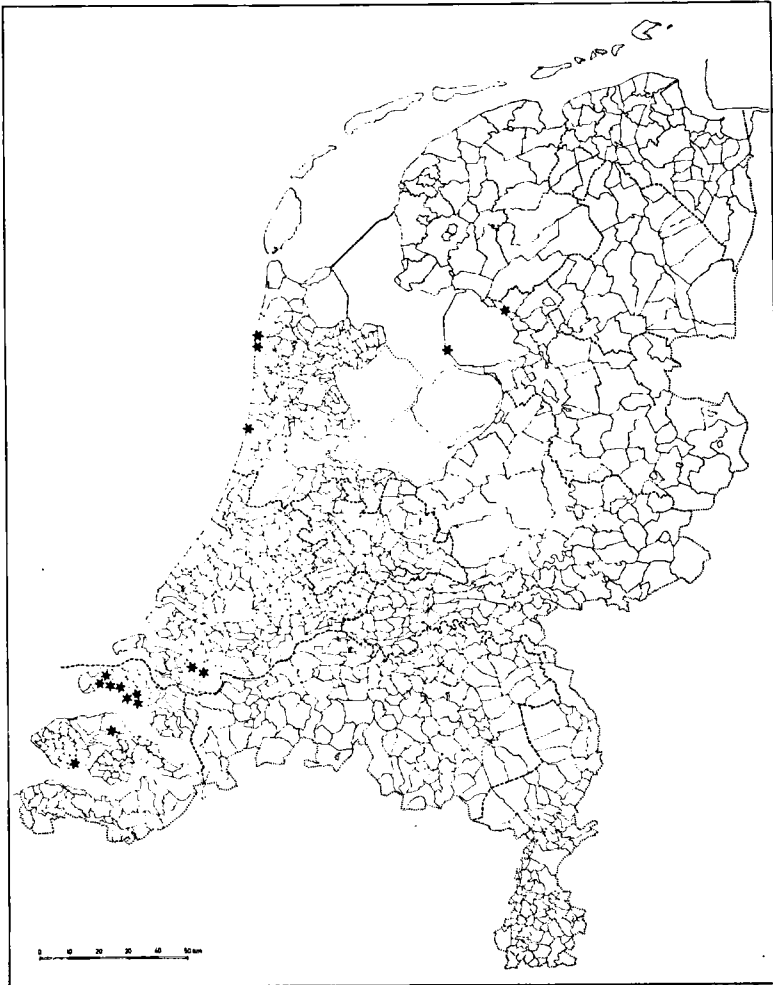


FIG. 1. Localities of *Jaera albifrons ischiosetosa* in the Netherlands,

***Jaera albifrons syei* Bocquet, 1950**

Ezumazijl, Harlingen, Schiermonnikoog, Terschelling (Oosterend, Formerum, West-Terschelling), Texel (Oosterend), Urk (20.VII.1932), Kreupel (1928, 1931, 1932), De Ven (1927), Den Oever, Den Helder, IJmuiden, Hellevoetsluis, Oudenhooft, Den Bommel, Middelharnis, Stad aan 't Haringvliet, Dintelsas, Galathese Haven, Oude-Tonge, Melissant, Battenoord, Ouddorp, Zijpe, Den Osse, Strijenham, Bergen op Zoom, Veersche Gat (and, after closing, in the Veersche Meer as well), Kats, Wolphaartsdijk, Kattendijke, Yerseke, Kruiningen, 's-Gravenpolder, Borssele, Vlissingen and Ossensisse.

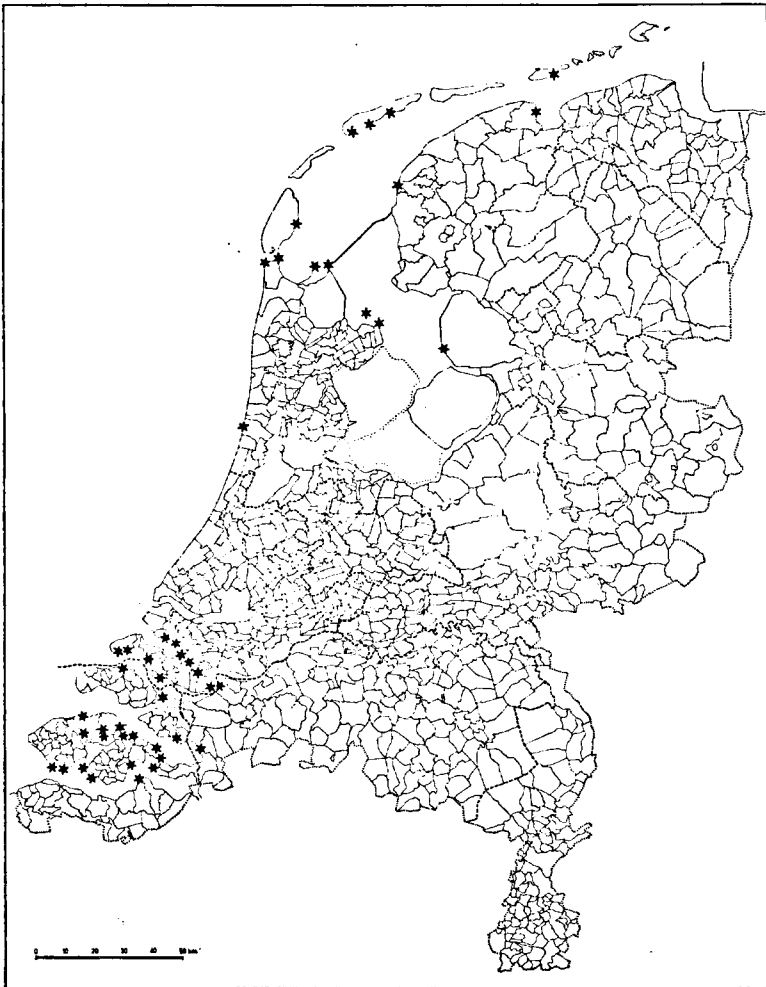


FIG. 2. Localities of *Jaera albifrons syei* in the Netherlands.

In a sample taken from the Veersche Meer one specimen of what appears to be a hybrid between *J. albifrons ischiosetosa* and *J. albifrons syei* has been observed: the 6th and 7th pereopodes possess a carpal lobe with setae on it (a character of *syei*) and at the same time curved setae on the ischium (a character of *ischiosetosa*).

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