

International Commission for Invertebrate Survey  
EUROPEAN INVERTEBRATE SURVEY



Provisional Atlas of  
The Invertebrates of Europe

Maps I-27

Edited by  
John HEATH & Jean LECLERCQ

INSTITUTE OF TERRESTRIAL ECOLOGY  
MONKS WOOD EXPERIMENTAL STN  
ABBOTS RIPTON (England)

FACULTE DES SCIENCES AGRONOMIQUES DE L'ETAT  
ZOOLOGIE GENERALE ET FAUNISTIQUE  
GEMBLOUX (Belgium)

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## INTRODUCTION

The maps in this Atlas are the first of all Europe to be published by the European Invertebrate Survey (EIS), which is one of the constituent bodies of the International Commission of Invertebrate Survey. These maps result from a special survey initiated in 1974 aimed at demonstrating the utility of distribution maps using the 50 km squares of the UTM grid as the mapping unit. It is also hoped that they will serve to stimulate further co-operative projects.

The data on which the maps of the Lepidoptera and Hymenoptera are based have been derived from information supplied by the national recording schemes and many individuals in each country, to which data from museum material and published records have been added. For the Nematoda the maps have been provided by the associated European Plant Parasitic Nematode Survey.

## ACKNOWLEDGEMENTS

In addition to the many individual national scheme recorders and the members of the EIS Committee, thanks are due to: Dr N Atanasov (Bulgaria), G Christensen (Greece), Dr H Descimon (France), Dr S Kellner-Pillault (Paris), T B Larsen (England), Br V Lefeber (Netherlands), O Lomboldt (Denmark) and Prof A K Merisuo (Finland) for providing data; Prof Dr K Schmidt (Germany) for acting as an organiser for the Hymenoptera and for abstracting many records from museum collections in Germany. The data were assembled in Gembloux by C Wouville and in Monks Wood by Mrs Jane Croft. The maps were plotted and prepared for publication by Miss Sharon Dodson at the Biological Records Centre, Monks Wood.

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September 1981

# LEPIDOPTERA

LEPIDOPTERA

The coverage of the countries is very uneven, and to indicate the extent of the cover  
a map of *Coenonympha pamphilus* L. is included.

PARINI  
APOLLO

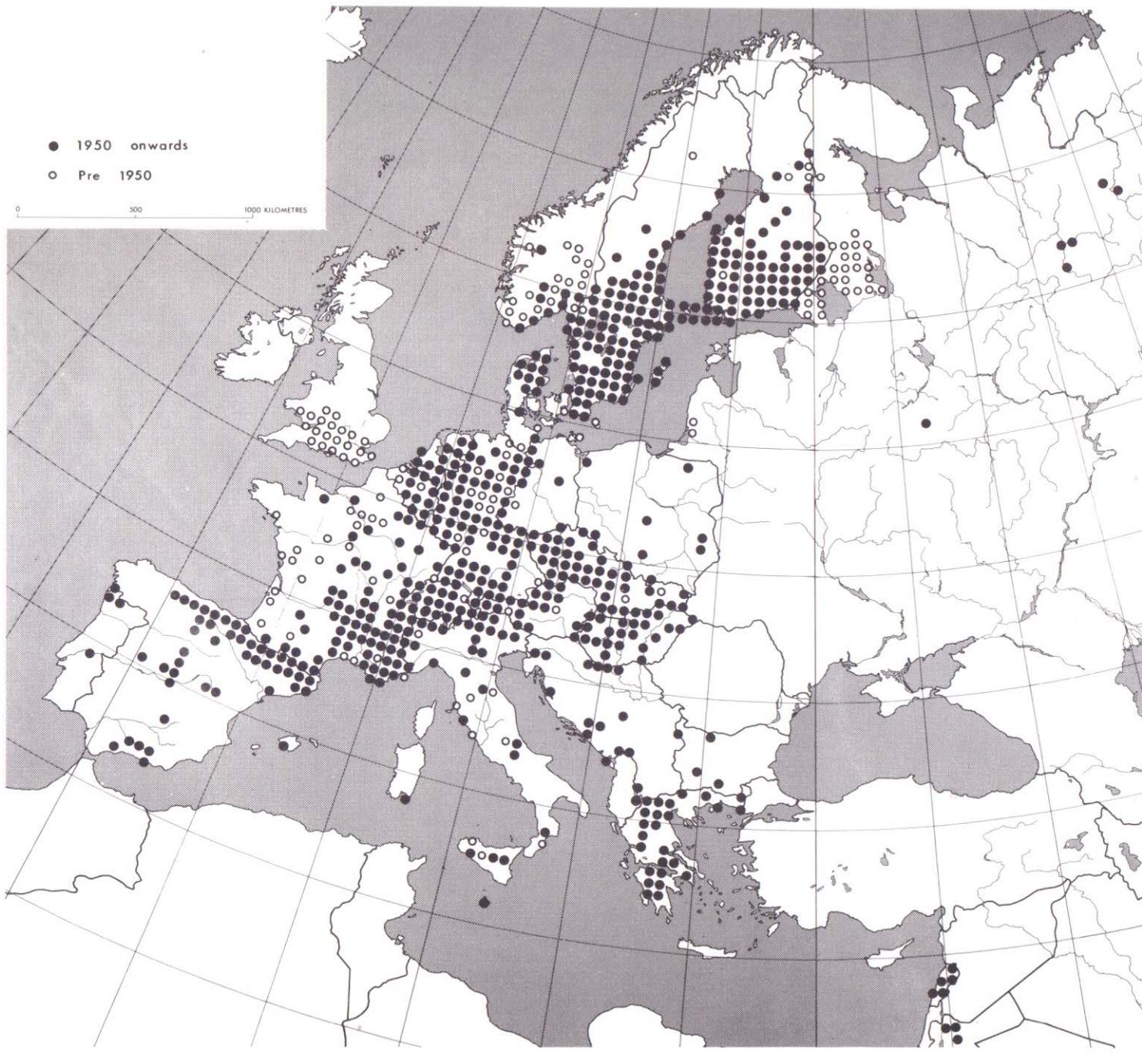
(V.)



2

APORIA  
CRATAEGI

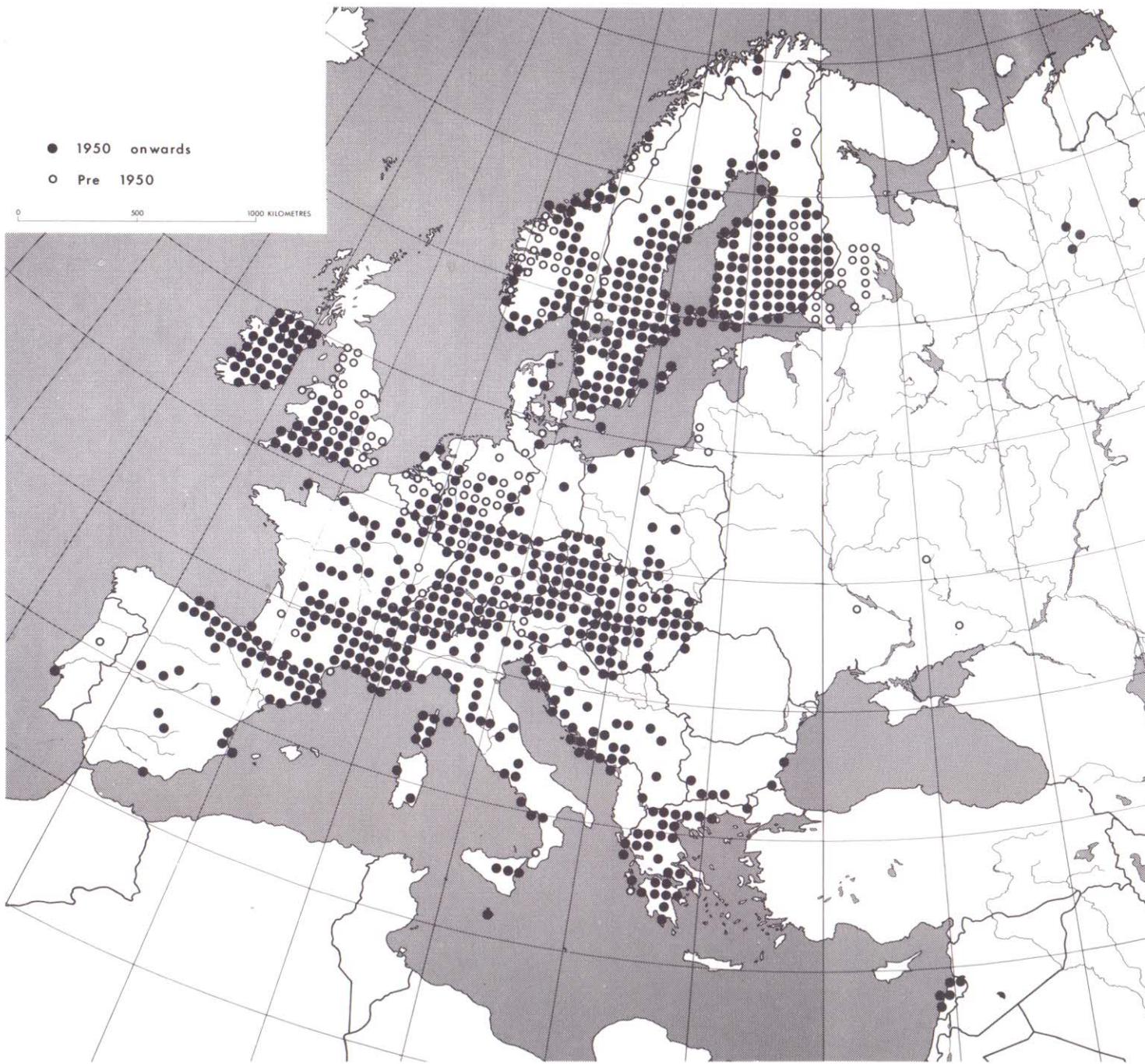
(L.)



3

LEPTIDEA  
SINAPIS

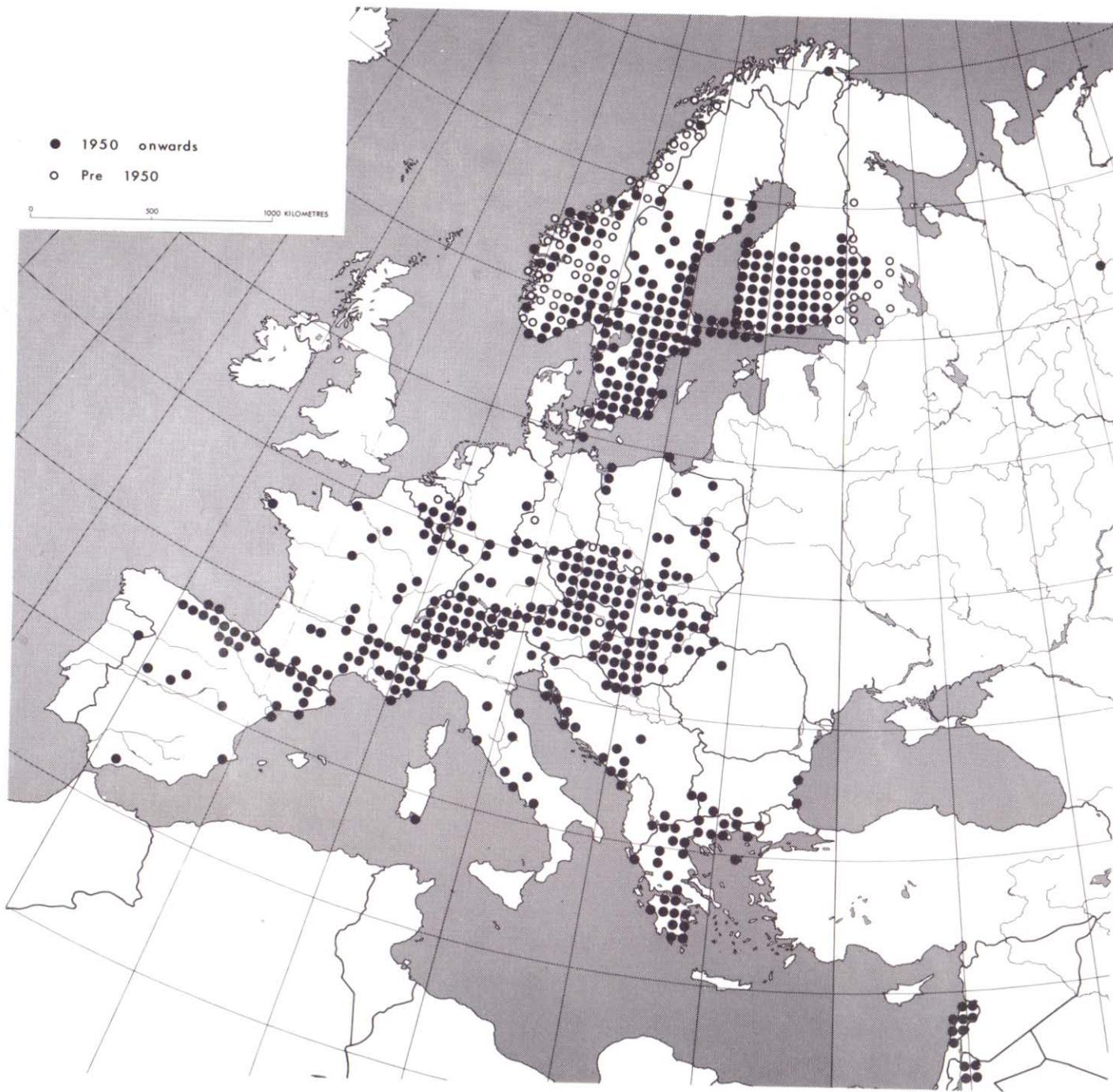
(L.)



4

LASIOMMATA  
MAERA

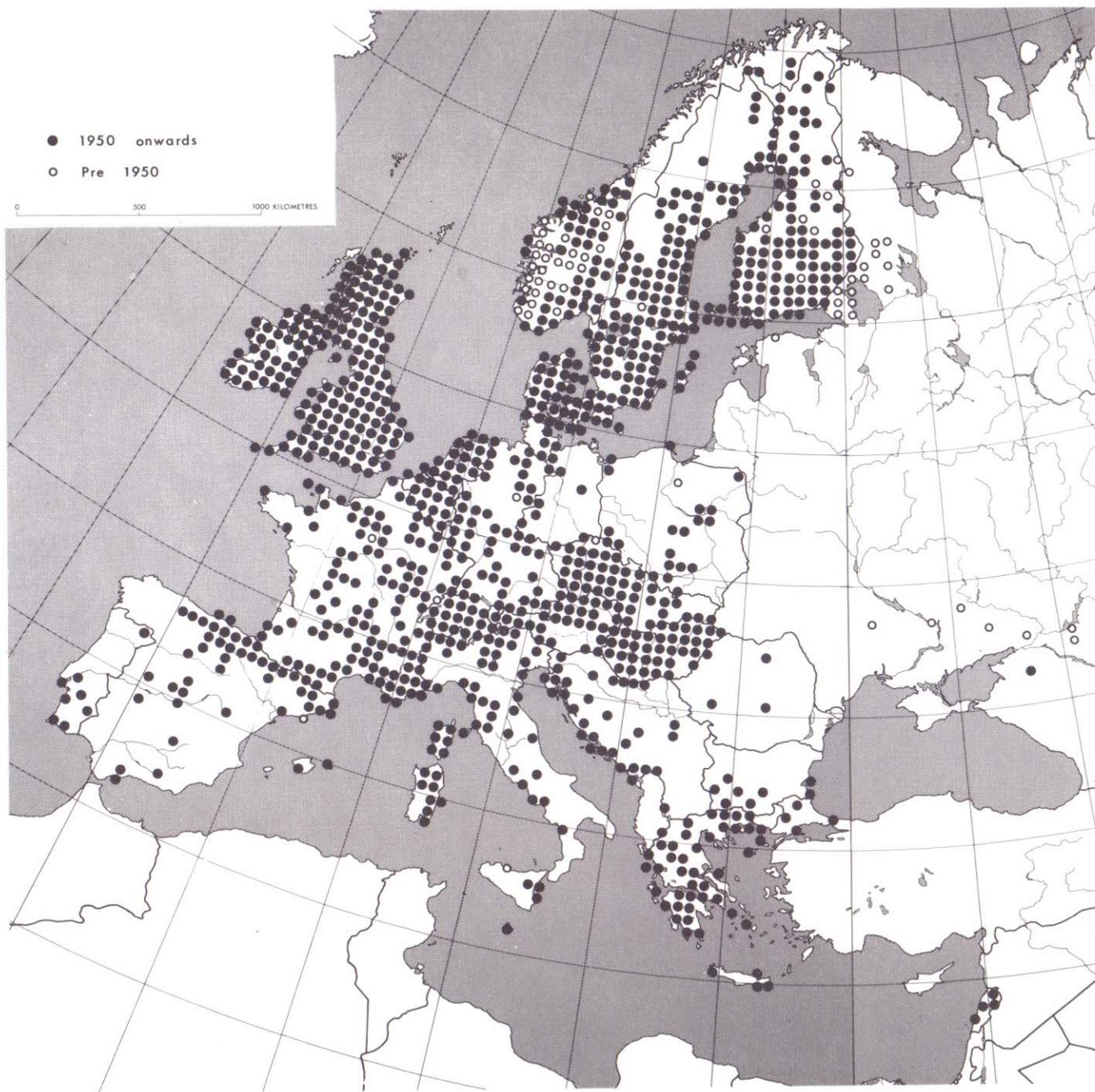
(L.)



5

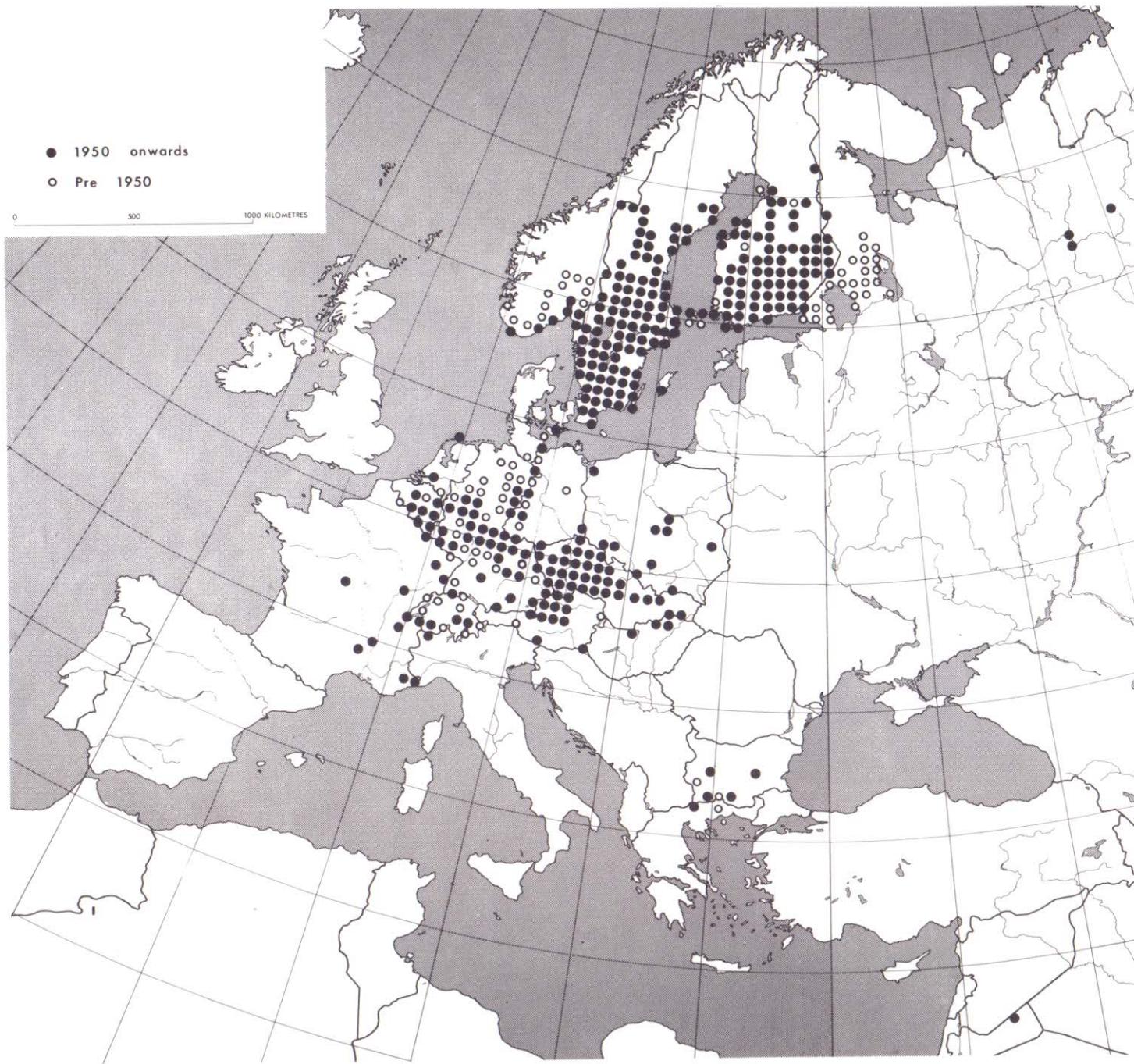
COENONYMPHA  
PAMPHILUS

(L.)



6

LIMENITIS  
POPULI  
(L.)



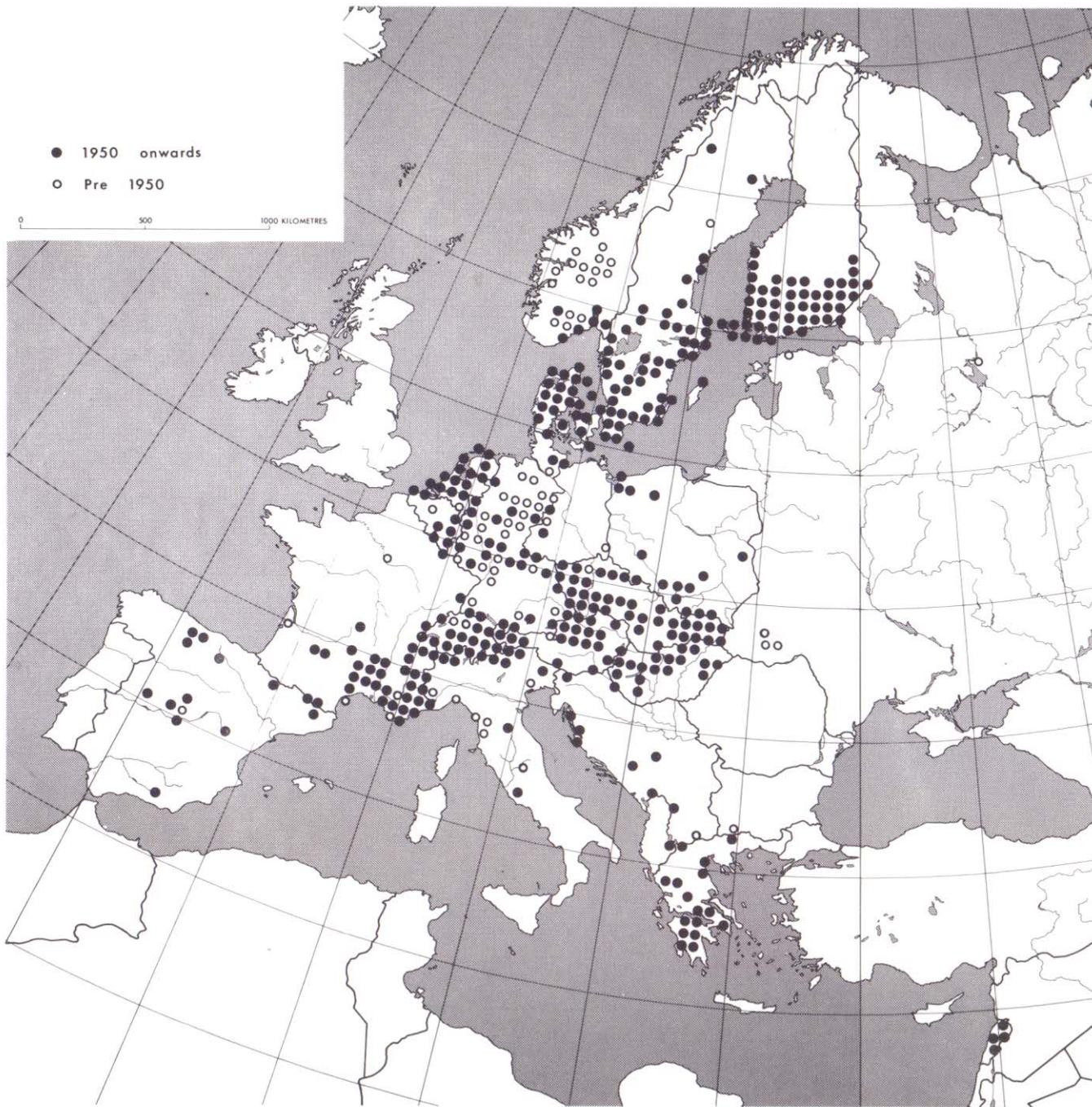
MELITAEA  
CINXIA

(L.)

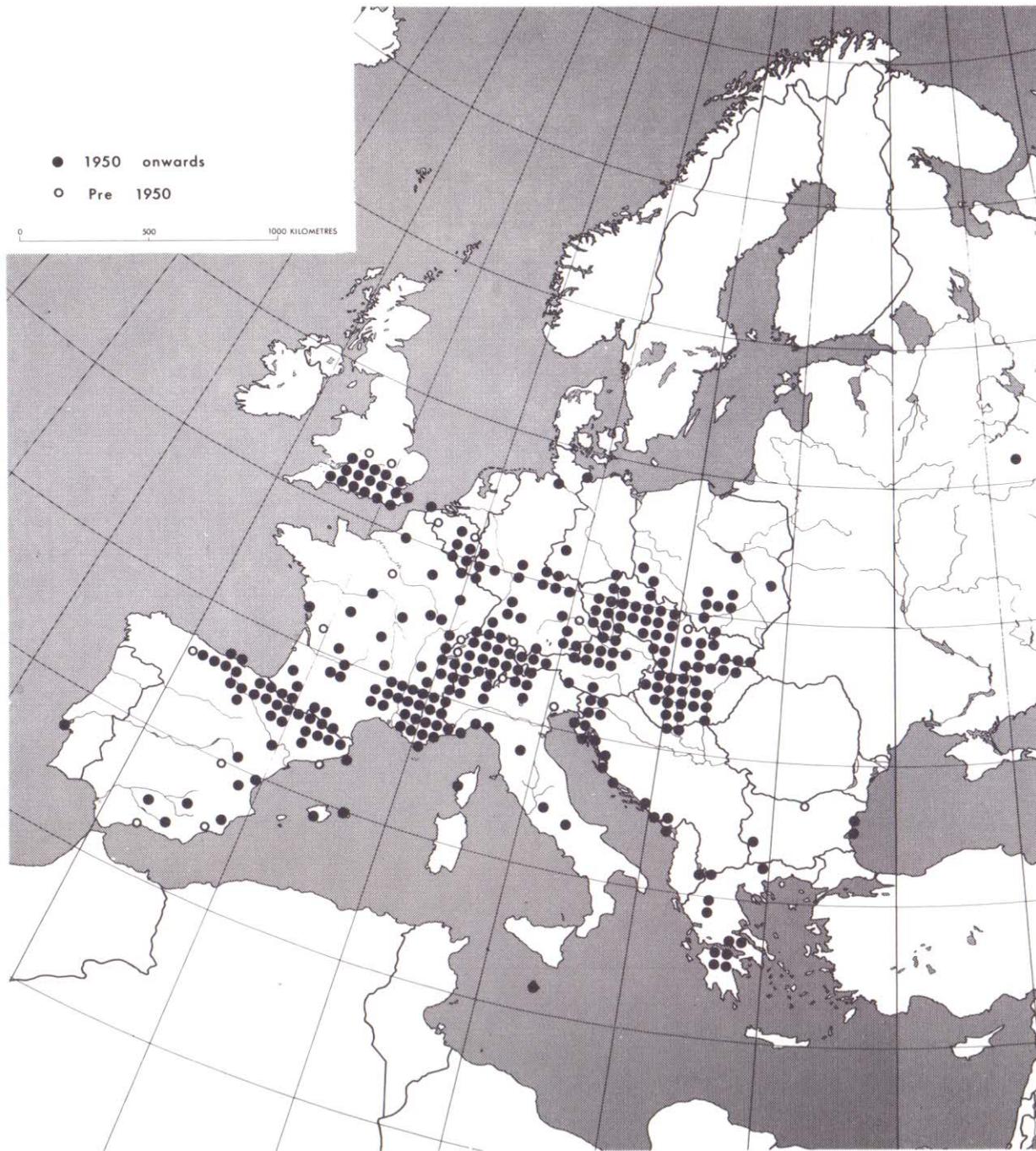


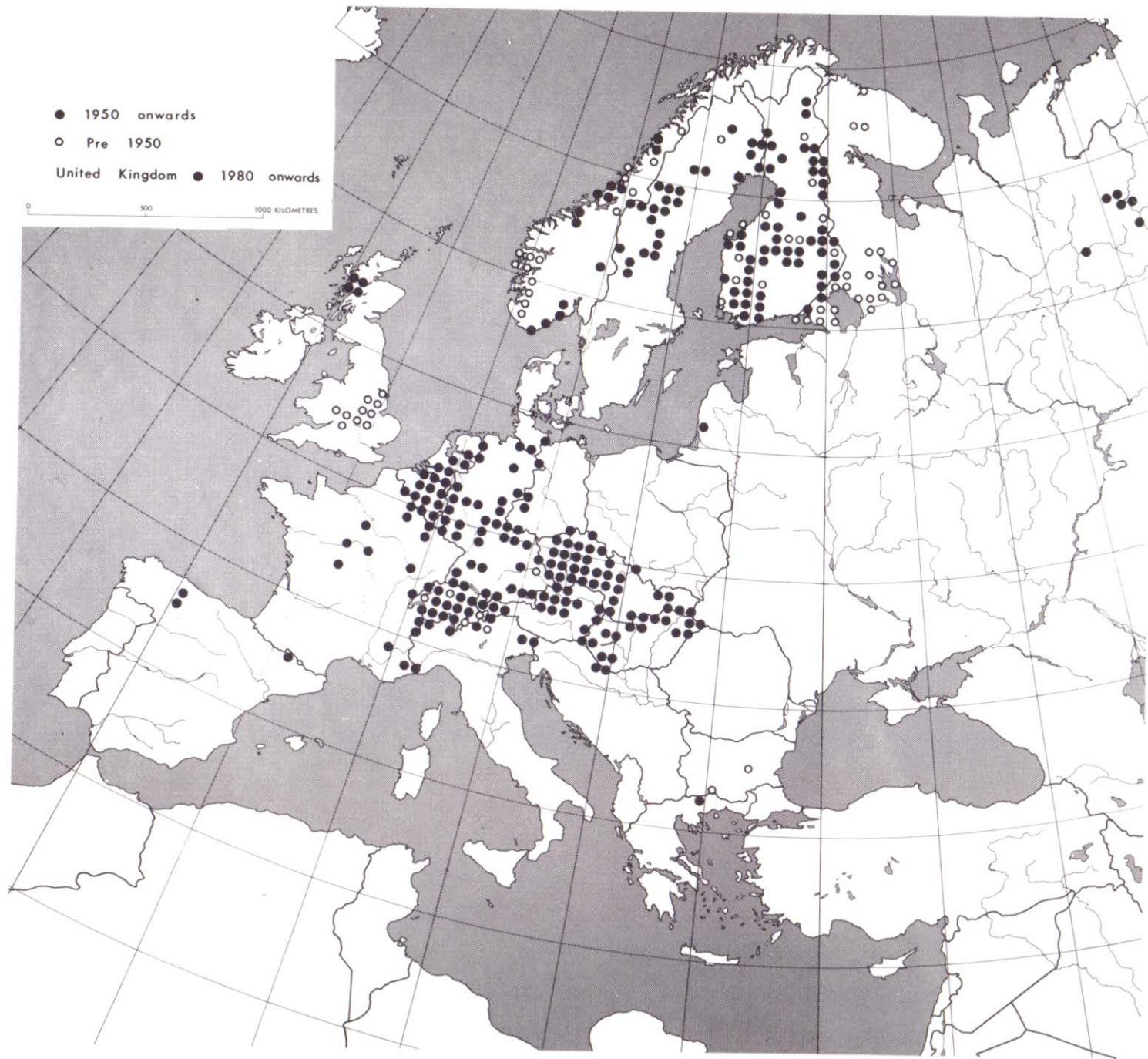
FABRICIANA  
NIOBE

(L.)



LYSANDRA  
BELLARGUS  
(Rottemburg)





10

## CARTEROCEPHALUS PALAEMON

(Pallas)

II

## ERIOGASTER CATAX

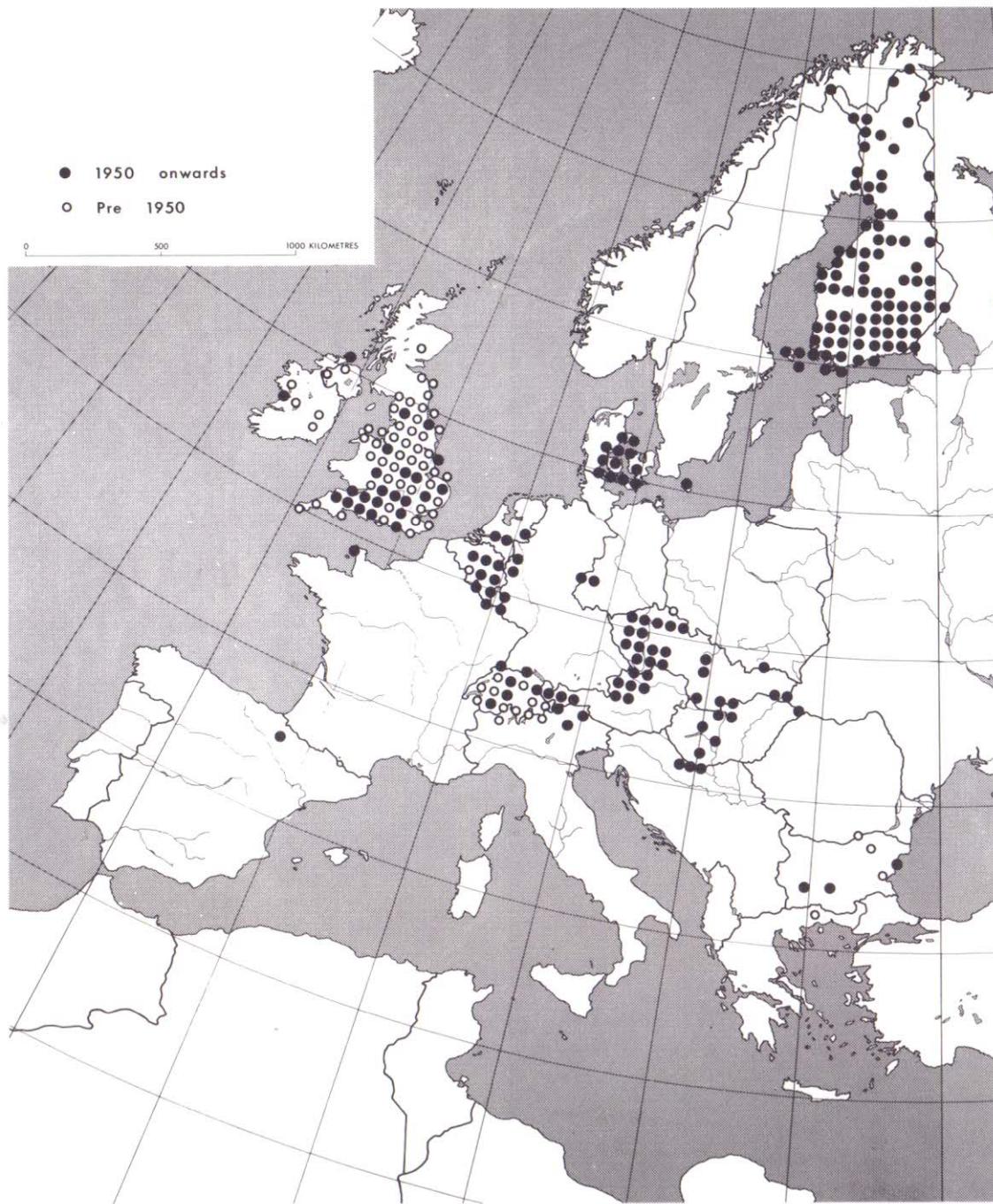
(L.)



12

ERIOGASTER  
LANESTRIS

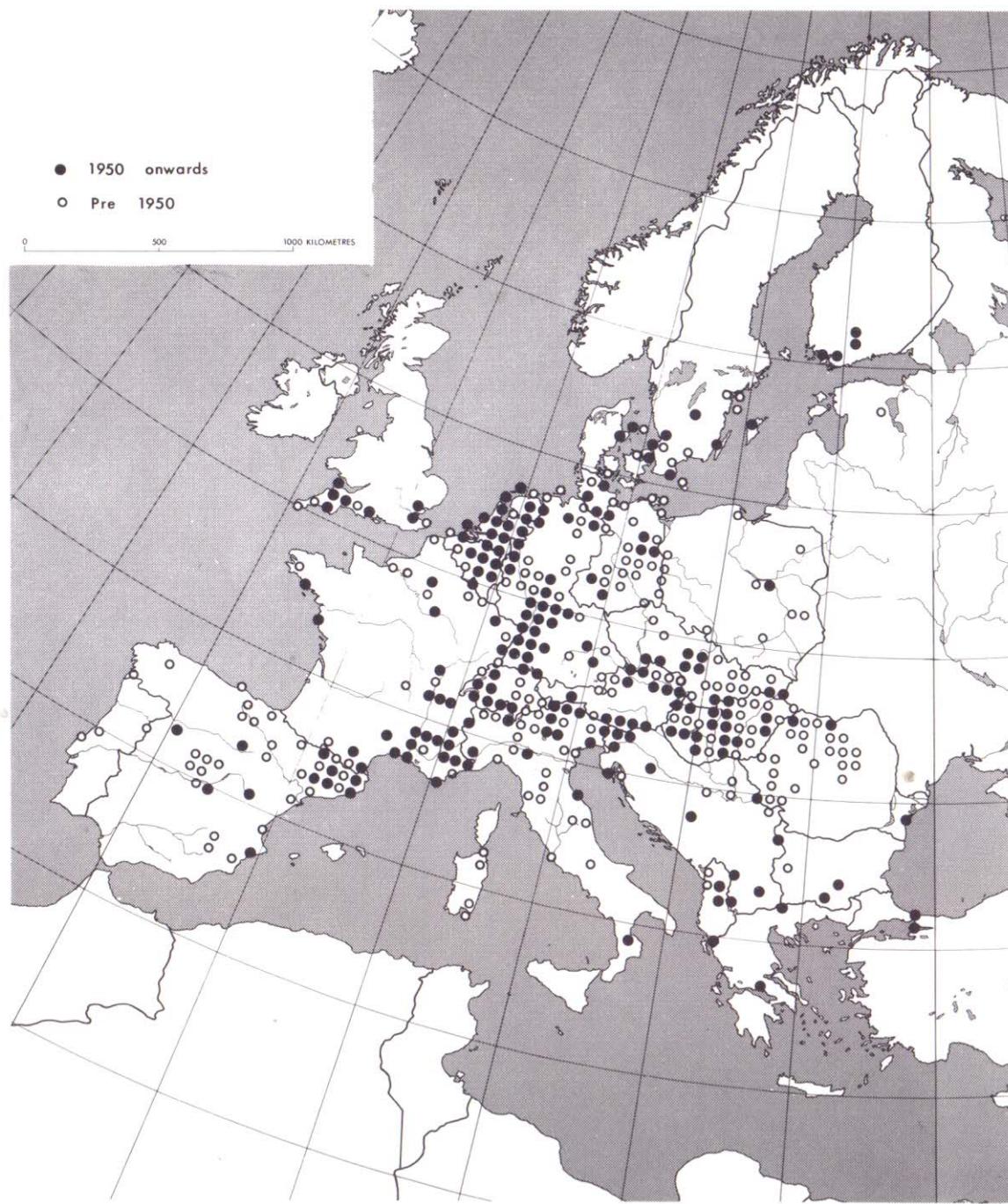
(L.)



# HYMENOPTERA

TIPHIA  
FEMORATA

(F.)



SCELIPIHRON  
SPIRIFEX

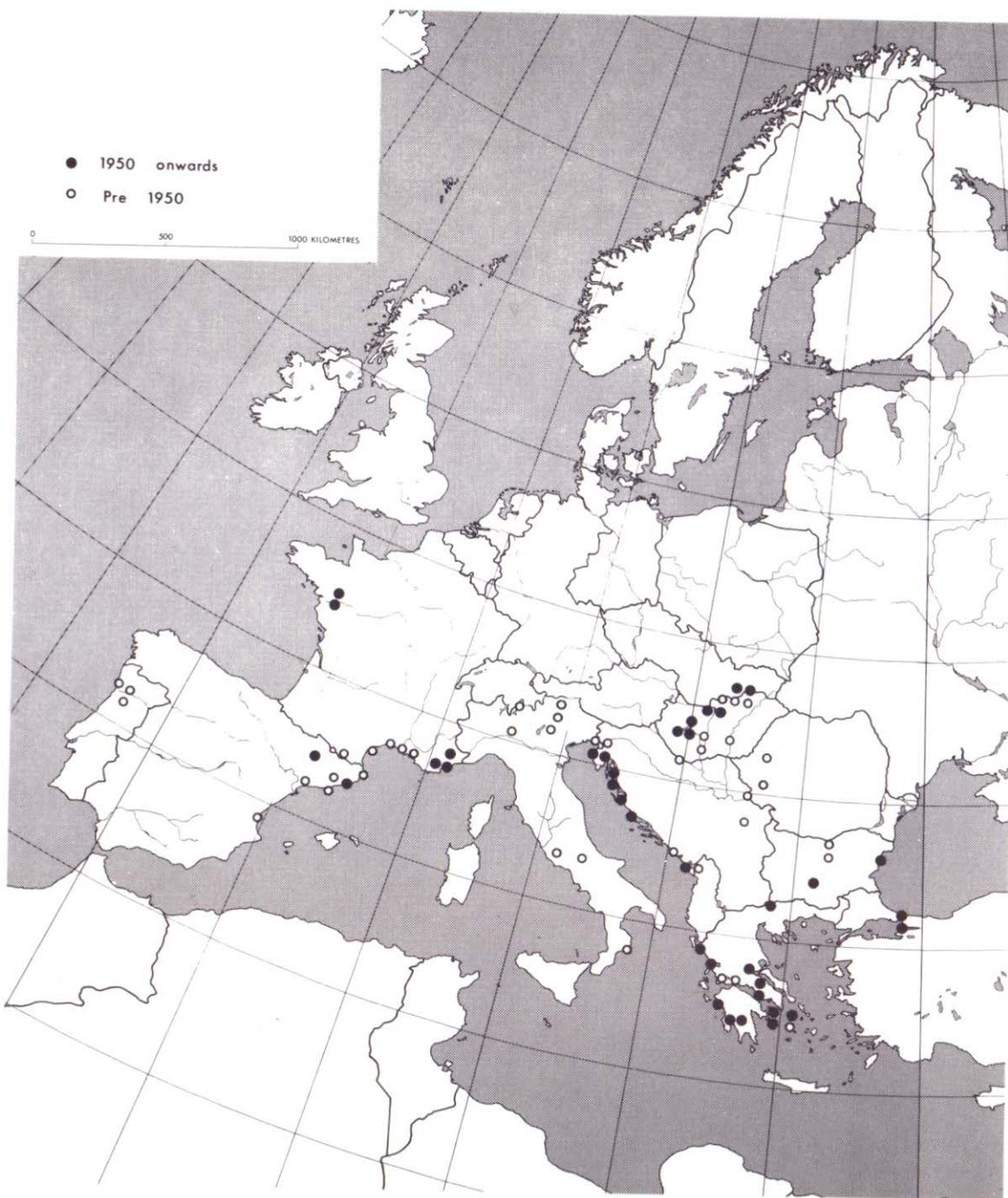
(L.)



15

CHALYBION  
FEMORATUM

(F)



PHILANTHUS  
CORONATUS

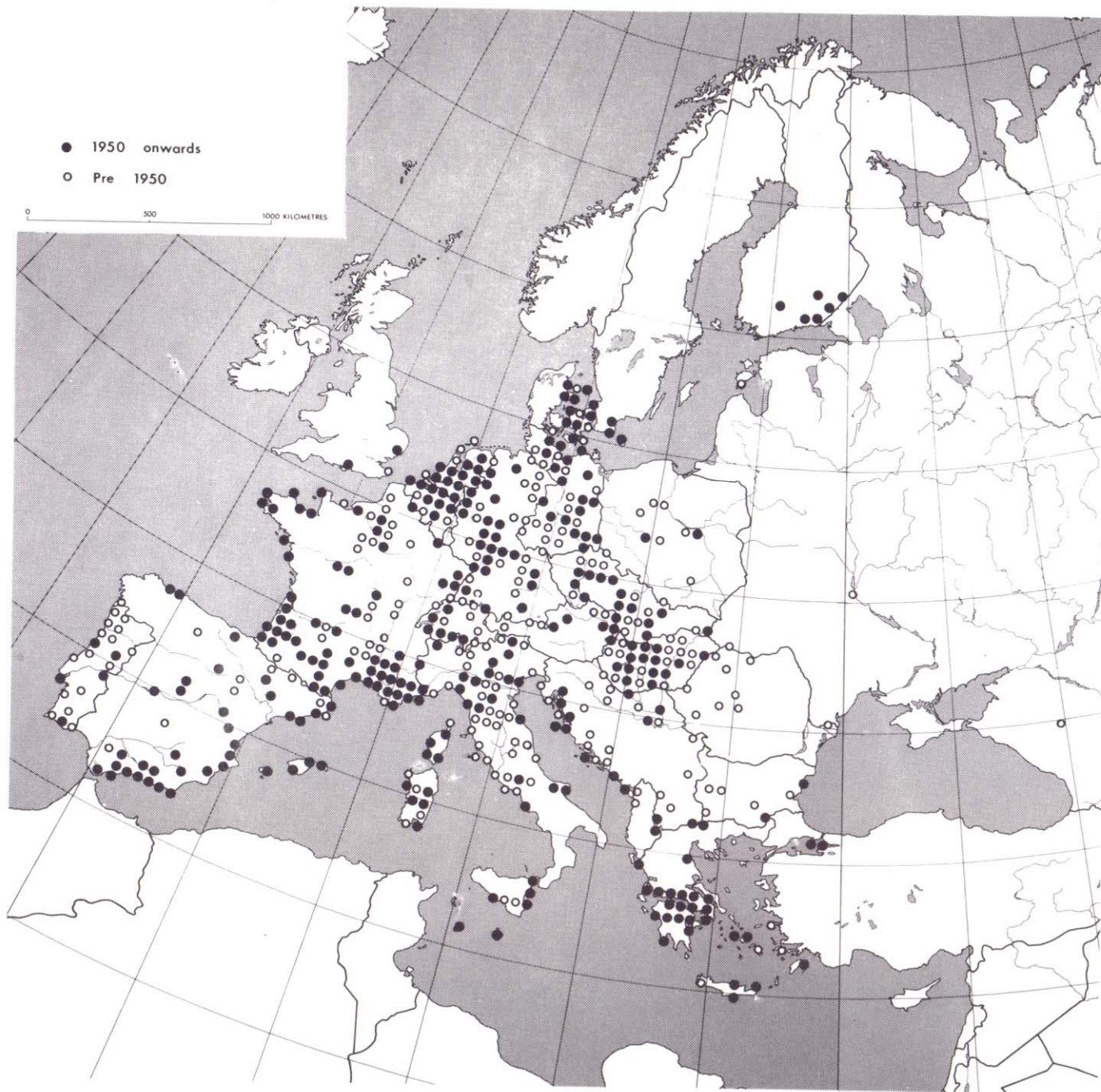
(F.)



17

PHILANTHUS  
TRIANGULUM

(F.)

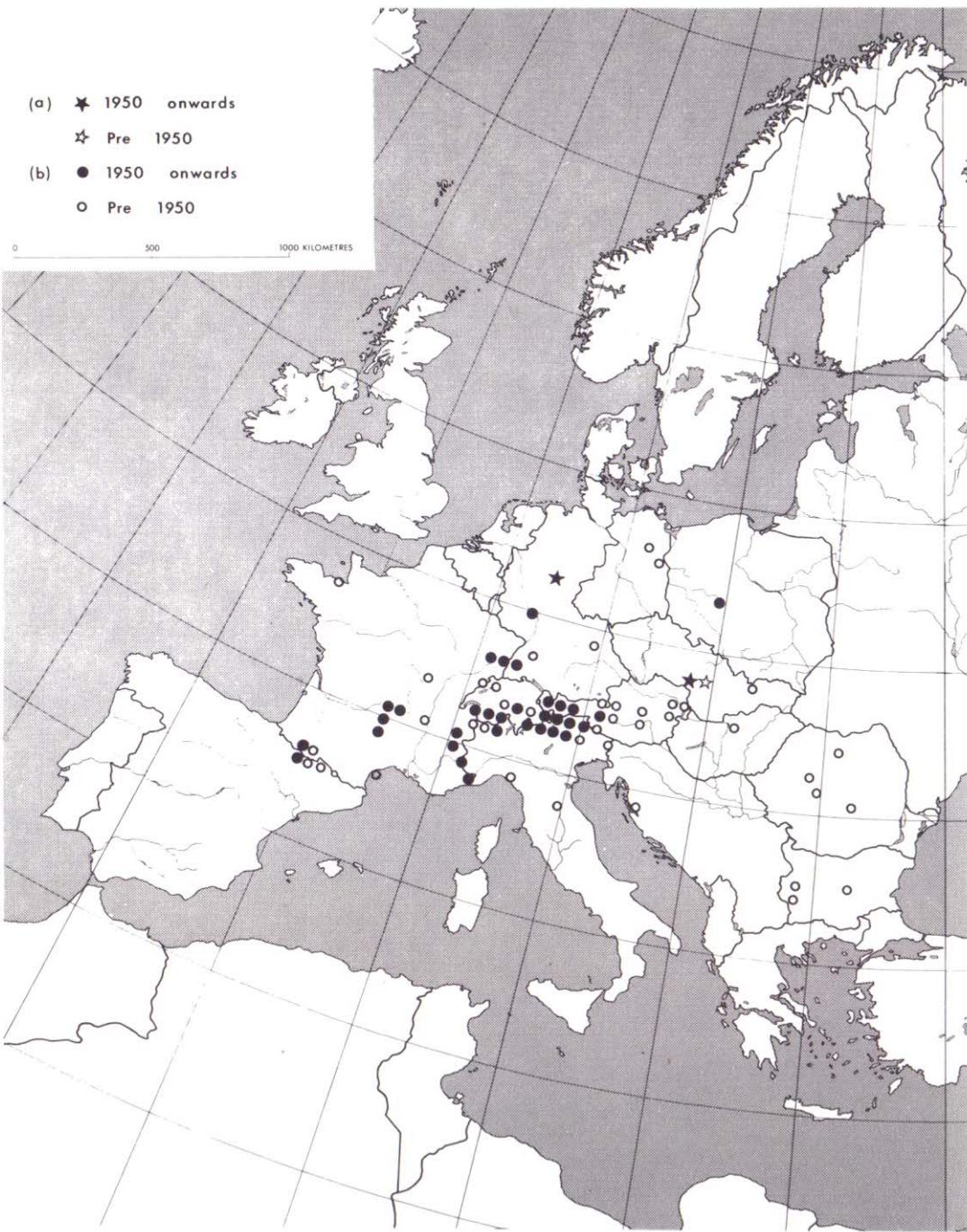


Attention: cette carte n° 18 est mauvaise, elle attribue à Crabro loewi des localités de Crabro alpinus et vice versa. Cette confusion due à une déficience technique sera clarifiée par la publication en 1982 de deux cartes correctes. -(Jean Leclercq-Gembloux).

---

18 (b)  
CRABRO  
ALPINUS  
Imhoff

(a)  
CRABRO  
LOEWI  
Dahlbom



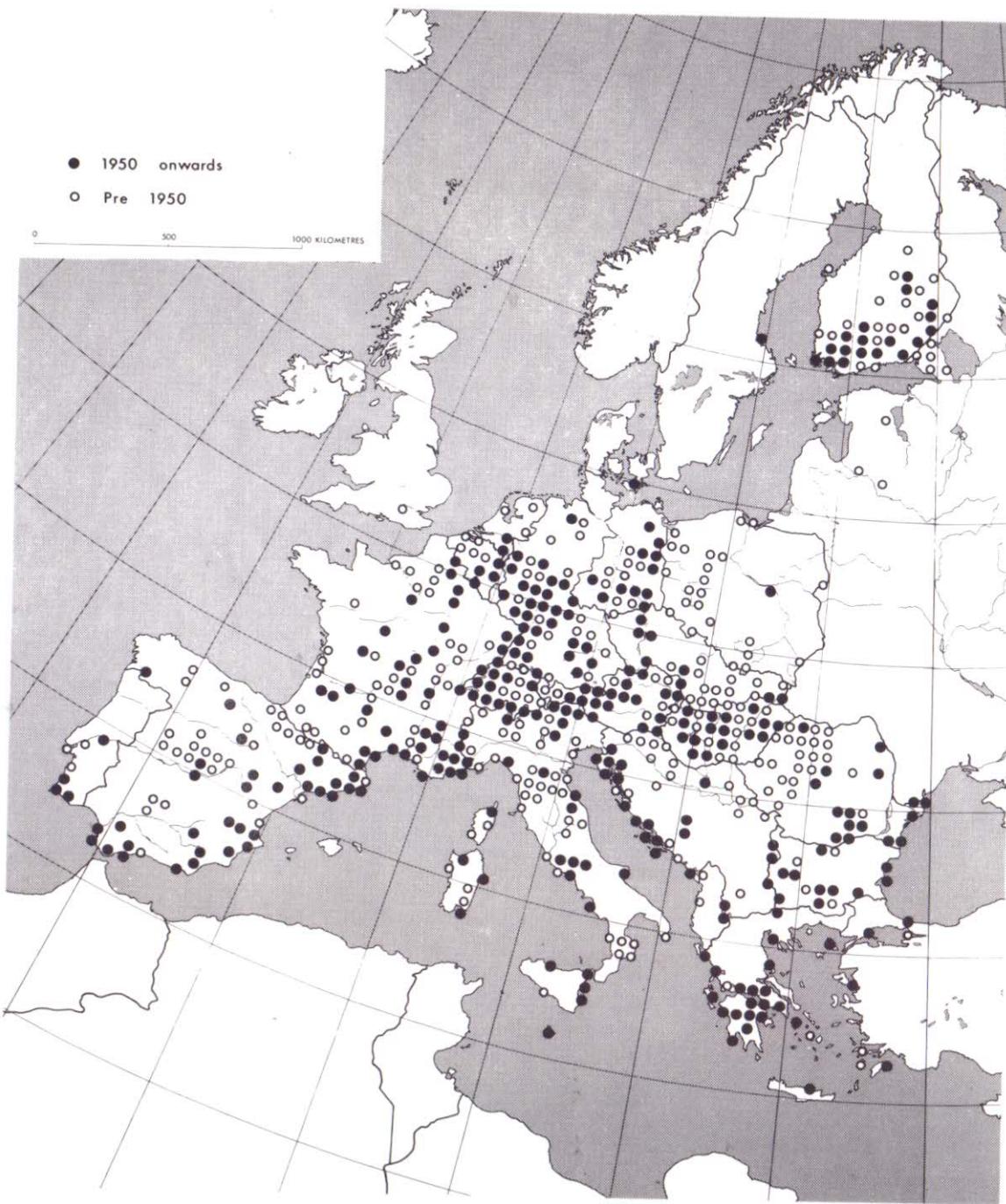
LESTICA  
ALATA

(Panzer)



20

LESTICA  
CLYPEATA  
(Schreber)



21

LESTICA  
SUBTERRANEA

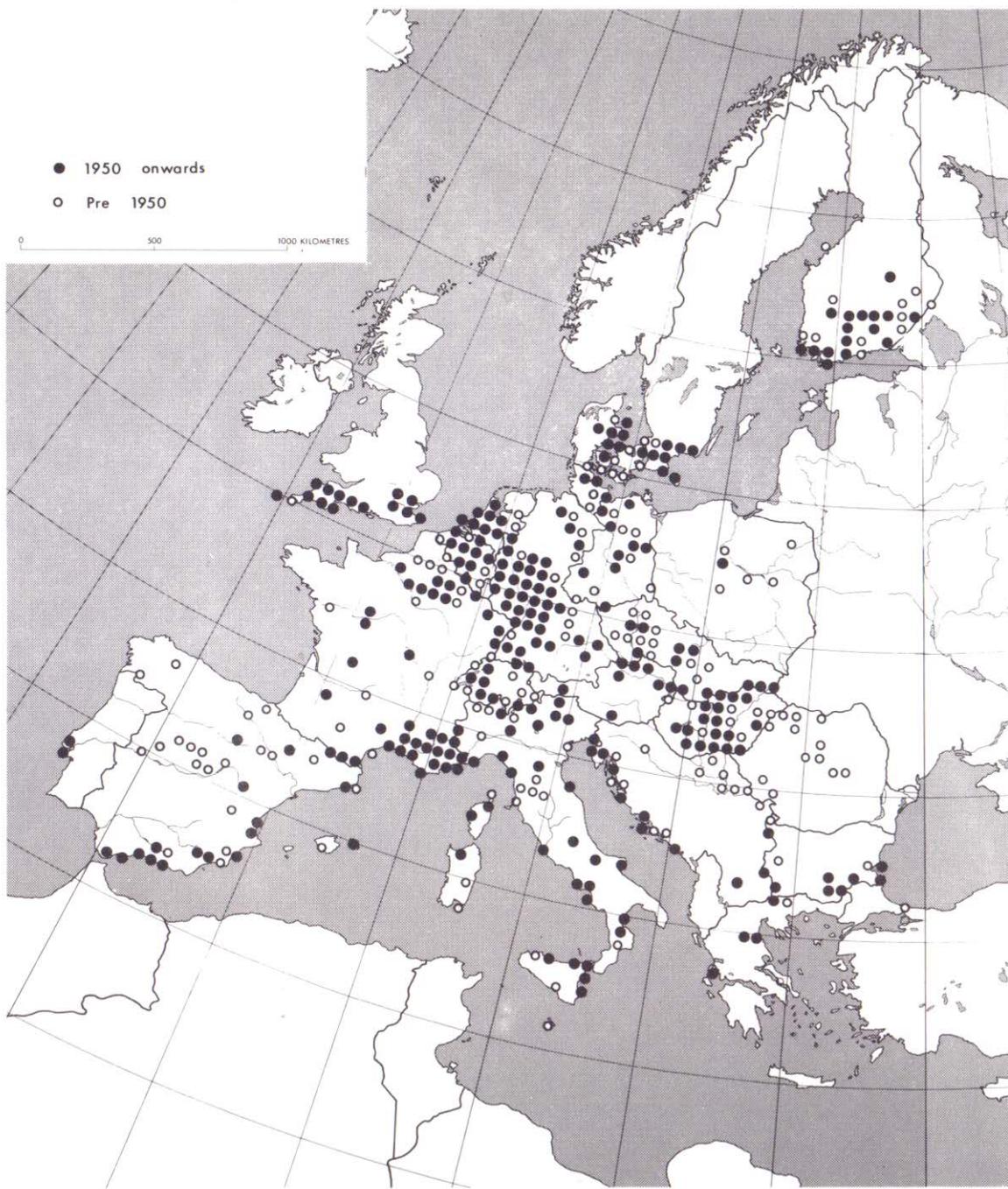
(F.)



22

ANTHIDIUM  
MANICATUM

(L.)



XYLOCOPA  
VIOLACEA

(L.)



# NEMATODA

#### THE EUROPEAN PLANT PARASITIC NEMATODE SURVEY

At a NATO-sponsored Advanced Study Institute entitled *Nematode Vectors of Plant Viruses* held in Italy in 1974, many participants expressed an interest in a scheme for a European Plant Parasitic Nematode Survey which was introduced and discussed.

In 1977 the European Science Research Council's *ad hoc* group on Biological Recording, Systematics and Taxonomy recommended "that the European Nematode Survey Programme be endorsed and that the appropriate national Research Councils examine ways of providing financial support for it". A booklet (Brown, D J F, Boag, B and Taylor, C E. 1978. *European Plant Parasitic Nematode Survey - Instructions for Participants*. Dundee: Scottish Horticultural Research Institute. Occasional Publication No 3, 16 pp), explains the EPPNS scheme and also gives advice on participation in the scheme.

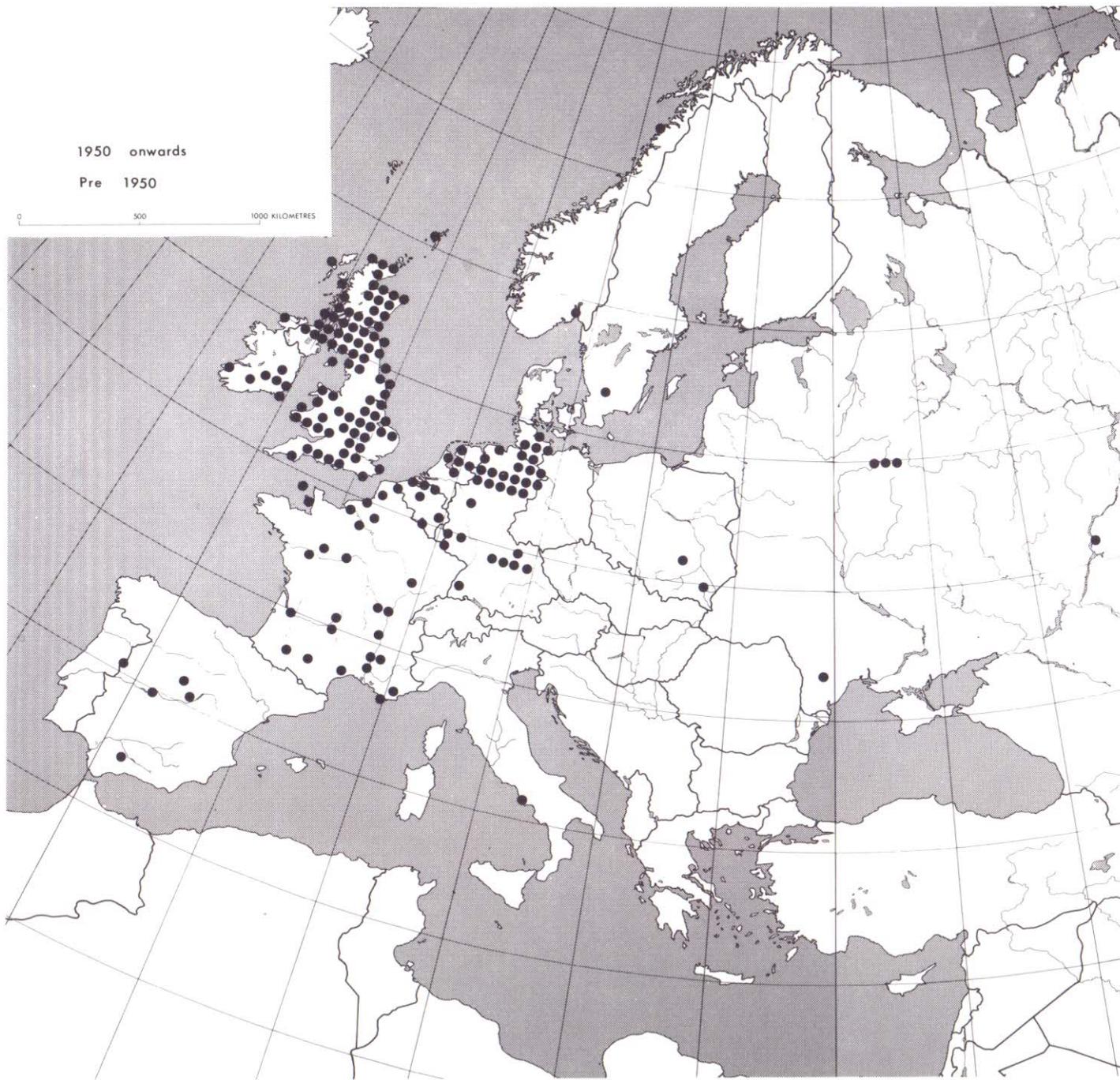
The distributions of the species of the two families Longidoridae and Trichodoridae, some species of which are able to transmit plant viruses, are presently being mapped for individual countries and will eventually be mapped for Europe as a whole. The accompanying maps, which are provisional, are prepared from selected, published records of the distribution of Longidorid and Trichodorid species in Europe.

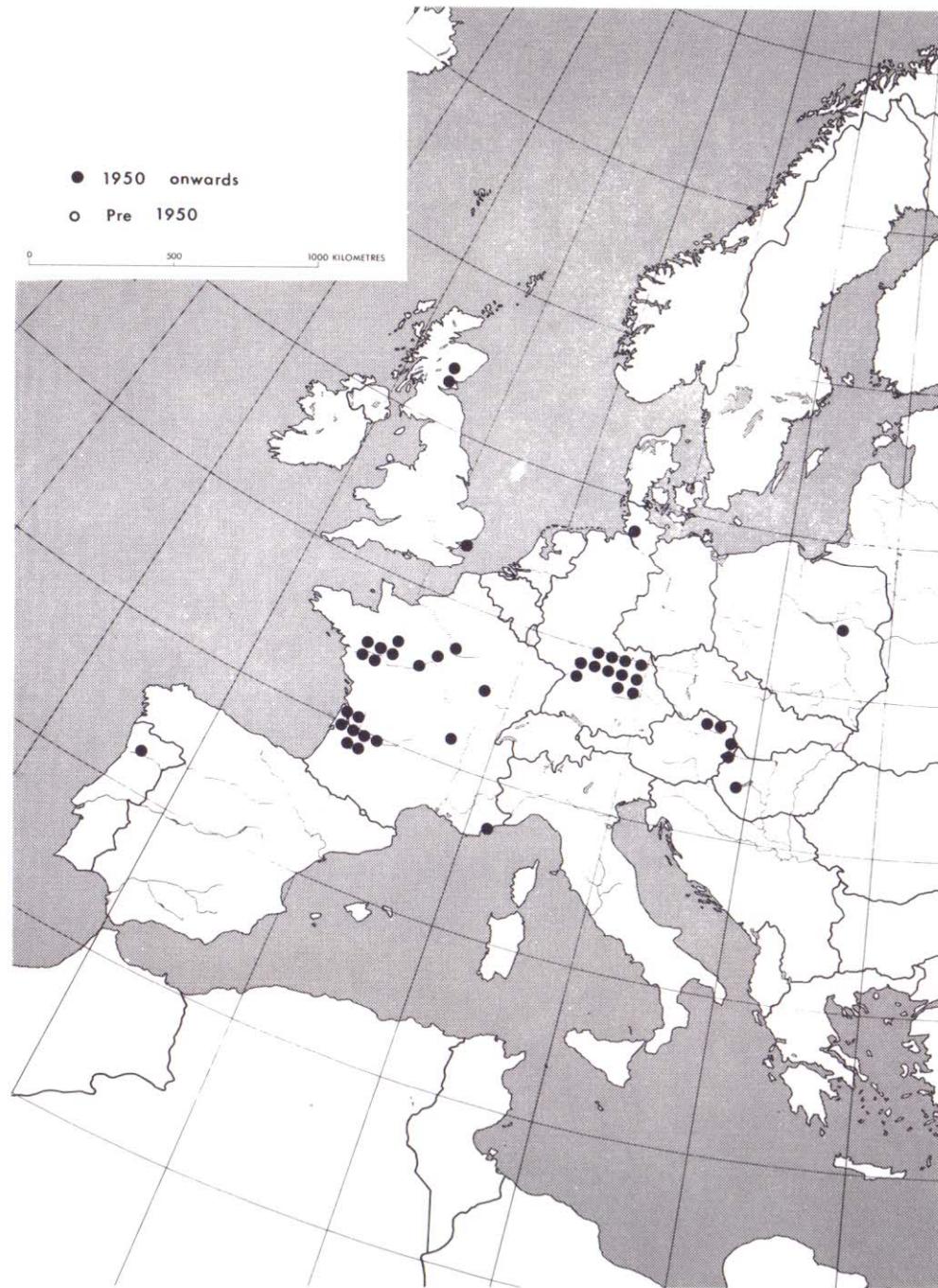
D J F Brown, B Boag and C E Taylor  
Scottish Horticultural Research Institute  
Invergowrie, Dundee DD2 5DA  
United Kingdom

24

LONGIDORUS  
ELONGATUS

(de Man)





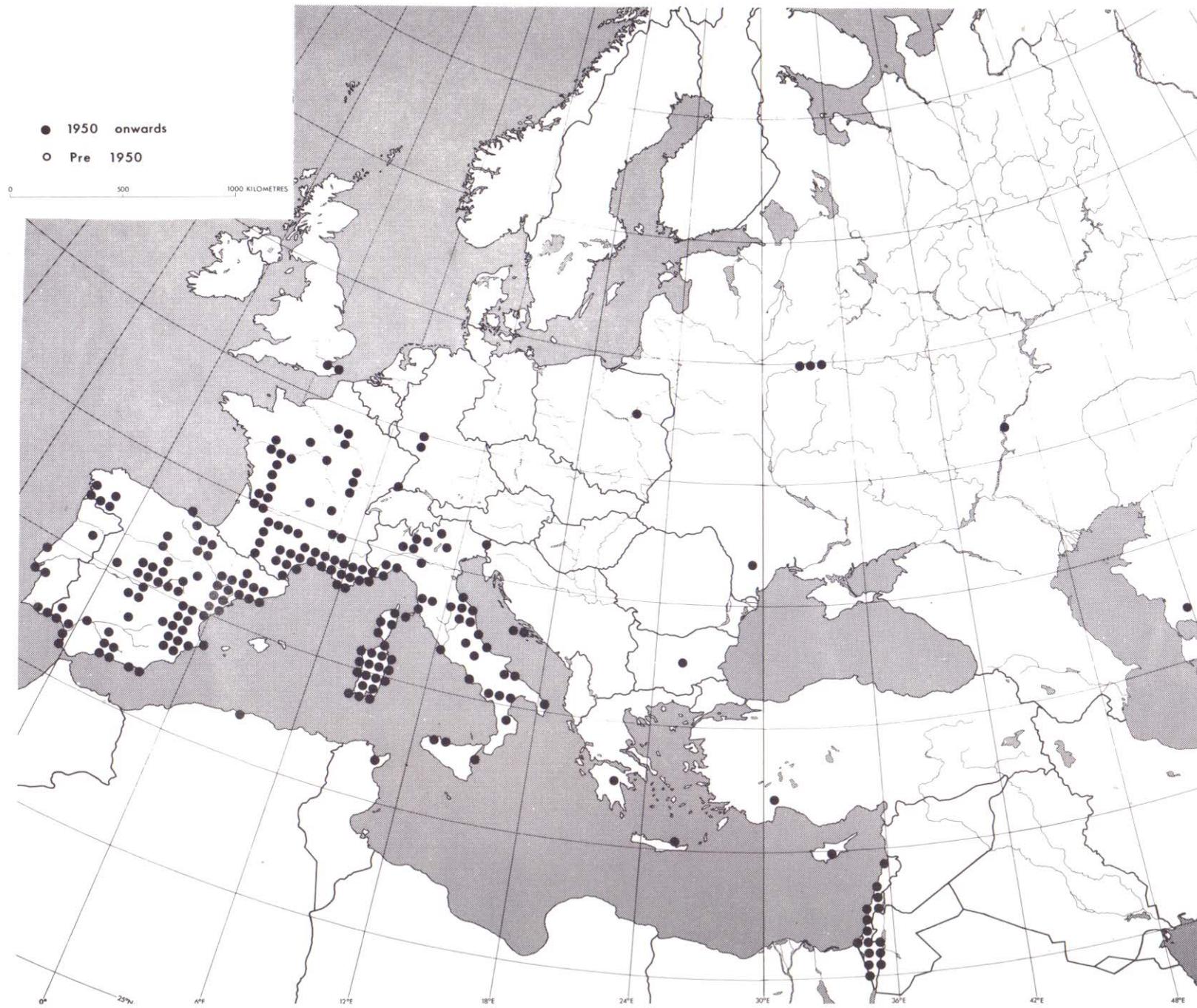
25

PARALONGIDORUS  
MAXIMUS

(Butschli)

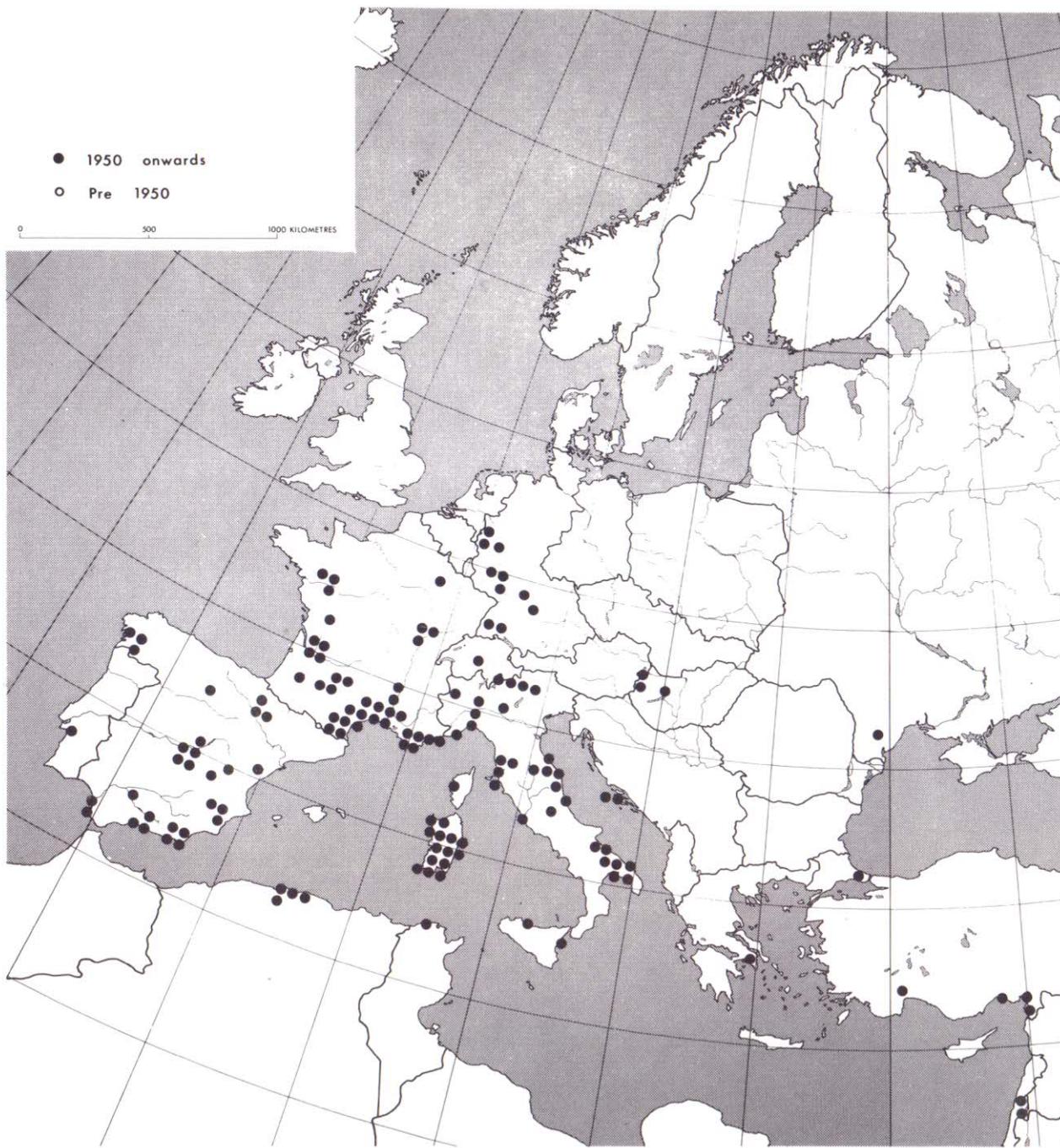
26

XIPHINEMA  
PACHTAICUM  
(Tulaganov)



## XIPHINEMA INDEX

Thorne & Allen



I N D E X

Species	Map number	Species	Map number
<b>Hymenoptera</b>			
<i>Anthidium manicatum</i> (L.)	22	<i>Coenonympha pamphilus</i> (L.)	5
<i>Chalybion femoratum</i> (F.)	15	<i>Eriogaster catax</i> (L.)	11
<i>Crabro alpinus</i> Imhoff	18b	<i>Eriogaster lanestris</i> (L.)	12
<i>Crabro loewi</i> Dahlbom	18a	<i>Fabriciana niobe</i> (L.)	8
<i>Lestica alata</i> (Panzer)	19	<i>Lasiomma maera</i> (L.)	4
<i>Lestica clypeata</i> (Schreber)	20	<i>Leptidea sinapis</i> (L.)	3
<i>Lestica subterranea</i> (F.)	21	<i>Liménitis populi</i> (L.)	6
<i>Philanthus coronatus</i> (F.)	16	<i>Lysandra bellargus</i> (Rottemburg)	9
<i>Philanthus triangulum</i> (F.)	17	<i>Melitaea cinxia</i> (L.)	7
<i>Sceliphron spirifex</i> (L.)	14	<i>Parnassius apollo</i> (L.)	1
<i>Tiphia femorata</i> (F.)	13	<b>Nematoda</b>	
<i>Xylocopa violacea</i> (L.)	23	<i>Longidorus elongatus</i> (de Man)	24
<b>Lepidoptera</b>			
<i>Aporia crataegi</i> (L.)	2	<i>Paralongidorus maximus</i> (Butschli)	25
<i>Carterocephalus palaemon</i> (Pallas)	10	<i>Xiphinema index</i> Thorne & Allen	27
		<i>Xiphinema pachtaicum</i> (Tulaganov)	26