



**KERBTIER.DE**  
BEETLE FAUNA OF GERMANY



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## Short manual for the function „map module“ on kerbtier.de

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4. Contribute data – but how?
5. Working with the German ordnance map TK25
6. Closing remarks
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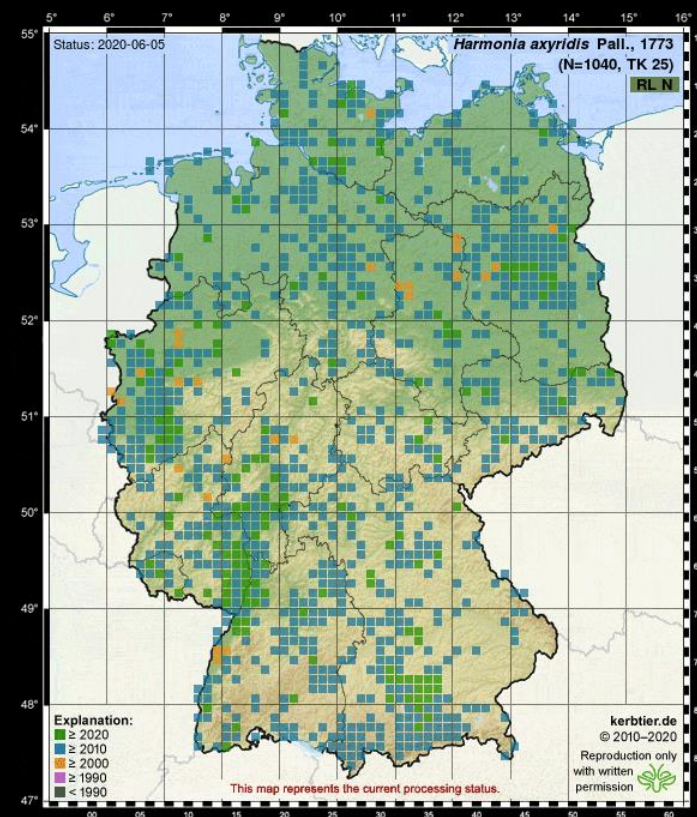
## 1. Introduction

The kerbtier.de map module allows to display distribution maps for the beetles of the German fauna.

The map display is based on the grid of the German ordnance map TK25 („Messtischblatt“). That implies, that the records displayed are normalized to quadrants about 10 x 10 kilometer in size. The map module is based on a SQL database and contains the year of the latest discovery as well.

The map module is a long-term joint project.

With close to 7000 beetle species and 2940 map sheets of the TK25, a very large theoretical number of 20 millions of records results for such a project. In reality, it is estimated that around 5 million records would give a fairly complete overview of the German beetle fauna. To collect such a number of records is only possible, if a large number of persons, professionals but also hobbyists and laypersons contribute their records to this project.





## 2. Accessing maps and the map module

### 1.) Display the distribution map for a certain species:

All photo overviews on [kerbtier.de](http://kerbtier.de) display a small green map symbol on the right of the species name. Just click the symbol to display a distribution map of the species. Javascript must be enabled, and the map will be displayed as a popup.

### 2.) Accessing the map module

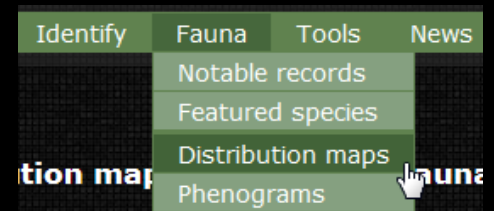
The map module can be accessed under the following address:

<http://www.kerbtier.de/cgi-bin/enFundort.cgi>.

This module allows to search for species by scientific name or name fragments. There are also species included which are currently not contained in the photo overviews of [kerbtier.de](http://kerbtier.de). Furthermore, the number of species and records is displayed and a list of contributors is available for download.



\*click\*







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### 3. Search and display maps

- (1) Search for multiple criteria including species names and map sheet numbers
- (2) Sorting and view modes (see next page)
- (3) Matches are displayed in this scrollbar. By clicking a species name the distribution map is displayed
- (4) Records are color-coded by latest year of discovery
- (5) Clicking a record displays ordnance map sheet number and name
- (6) Statistical data / downloads

Search species matching **all** of the below criteria (≤3):

Species **contains** **Bembidion**

**Search** **Reset**

1

Preferences:

Mode: **map static**

Sort: **systematic**

Direction: **ascending**

Cluster: ☐ by family

2

Show: ☐ State borders ☒ Fauna regions ☐ Rivers ☐ Grid Aggregation: **TK 25**

5

Matching species: 75

<i>Bembidion striatum</i>	5
<i>Bembidion foraminosum</i>	3
<i>Bembidion argenteolum</i>	15
<i>Bembidion velox</i>	13
<i>Bembidion litorale</i>	8
<i>Bembidion pygmaeum</i>	11
<i>Bembidion nigricorne</i>	5
<i>Bembidion lampros</i>	123
<i>Bembidion properans</i>	71
<i>Bembidion punctulatum</i>	57
<i>Bembidion pallidipenne</i>	4
<i>Bembidion bipunctatum</i>	6
<i>Bembidion ruficollis</i>	4
<i>Bembidion dentellum</i>	61
<i>Bembidion obliquum</i>	22
<i>Bembidion varium</i>	49
<i>Bembidion semipunctatum</i>	42
<i>Bembidion ephippium</i>	2
<i>Bembidion prasinum</i>	7
<i>Bembidion tibiale</i>	31
<i>Bembidion geniculatum</i>	10
<i>Bembidion atrocaeruleum</i>	16
<i>Bembidion varicolor</i>	18
<i>Bembidion conforme</i>	5
<i>Bembidion fasciculatum</i>	21
<i>Bembidion ascendens</i>	10
<i>Bembidion monticola</i>	14
<i>Bembidion fulvipes</i>	2
<i>Bembidion deletum</i>	56
<i>Bembidion incognitum</i>	3
<i>Bembidion latinum</i>	1
<i>Bembidion stephensii</i>	14
<i>Bembidion malleri</i>	6
<i>Bembidion lunatum</i>	7
<i>Bembidion bruxellense</i>	11
<i>Bembidion maritimum</i>	1
<i>Bembidion tetracolum</i>	149
<i>Bembidion cruciatum</i>	5

4

Explanation: ● ≥ 2010 ● ≥ 2000 ● ≥ 1990 ○ < 1990

6

Database: 107,132 OBSERVATIONS 4,237 SPECIES 1,847 CONTRIBUTORS 2018-11-01 LAST UPDATE



### 3. View modes

- (1) List  
Quick overview as a text-based list, without photo/map view.
- (2) Thumbnails small  
Quick photo overview, for larger number of species.
- (3) Thumbnails large  
Detailed photo overview with additional data functionality.
- (4) Map static  
Static map view of records as GIF map.
- (5) Map dynamic  
Dynamic map view with Google Maps API v3.  
With extended map functionality.
- (6) Catalogue and distribution atlas  
of the beetle fauna Germany – colkat.de

1

2

3

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6

Bembidion striatum  
Bembidion argenteolum  
Bembidion litorale  
Bembidion nigricorne  
Bembidion properans  
Bembidion foraminosum  
Bembidion velox  
Bembidion pygmaeum  
Bembidion lampros  
Bembidion punctulatum

Kein Thumbnail verfügbar

Bembidion striatum  
Bembidion argenteolum  
Bembidion velox  
Bembidion litorale  
Bembidion pygmaeum  
Bembidion nigricorne  
Bembidion lampros  
Bembidion properans  
Bembidion punctulatum  
Bembidion pallidipenne

Showing: ☒ State borders ☐ Fauna regions ☐ Rivers ☐ Grid Aggregation: TK 25

Matching species: 73

Bembidion striatum  
Bembidion foraminosum  
Bembidion argenteolum  
Bembidion velox  
Bembidion litorale  
Bembidion pygmaeum  
Bembidion nigricorne  
Bembidion lampros  
Bembidion properans  
Bembidion punctulatum  
Bembidion pallidipenne

Search:  Place  Aggregation: TK 25 Preferences:

Karte

Dänemark  
Sønderjylland  
Malmö  
Odense  
Kiel  
Lübeck  
Rostock  
Hamburg  
Bremen  
Ostfriesland

Matching species: 73

Bembidion striatum  
Bembidion foraminosum  
Bembidion argenteolum  
Bembidion velox  
Bembidion litorale  
Bembidion pygmaeum  
Bembidion nigricorne  
Bembidion lampros  
Bembidion properans  
Bembidion punctulatum  
Bembidion pallidipenne

Source: Catalogue and distribution atlas of the beetle fauna Germany – colkat.de

Matching species: 74

Bembidion striatum  
Bembidion foraminosum  
Bembidion argenteolum  
Bembidion velox  
Bembidion litorale  
Bembidion pygmaeum  
Bembidion nigricorne  
Bembidion lampros  
Bembidion properans  
Bembidion punctulatum  
Bembidion pallidipenne





## 4 Contribute data – but how?

### 4.1 Who can contribute? What should be considered?

Everybody can contribute data, regardless of whether you are a professional, a beetle enthusiast or a layperson. The kerbtier.de map module draws its lifeblood particularly from the contributions of people from all over Germany.

Despite all efforts to reach a database as large as possible with regard to species and areas covered, the scientific minimum standards in the determination of the species must not be ignored.

Therefore all potential contributors of data should ask themselves the following questions:

- Is my determination of the species sufficiently reliable?
- Is my determination verified by an independent expert? (by inspection of a specimen? in a internet forum?)
- Do I have a proof of the record if required, e.g. a specimen or a good photo of the recorded beetle?

If you can answer all these questions with “yes”, you’re ready to submit your data to the kerbtier.de database. On the following pages you’ll find a description how to do it.



## 4.2 Submission of data

To add a record to the kerkbtier.de faunistics database, the following information is required:

- Name and first name of the contributor
- Scientific name of the species
- Number of the map sheet of the German ordnance map, where the specimen has been discovered
- Year of discovery

The internal structure of the database looks as follows:

Species name	Map sheet number	Year	Contributor ID
<i>Absidia rufotestacea</i>	7415	2009	M0002
<i>Absidia schoenherri</i>	6743	2007	M0007
<i>Absidia schoenherri</i>	7315	2009	M0001
<i>Acalles aubei</i>	6514	2010	M0001
<i>Acalles camelus</i>	6518	2008	M0001
<i>Acalles commutatus</i>	4115	2006	M0002
<i>Acalles commutatus</i>	6818	2008	M0001

The closer the format of the submitted data is to the above example, the easier it'll be to include the data in the faunistics database. Every contributor will get a unique identifier, which will be saved with her/his records.



#### 4.2.1 As Excel workbook

The best way to submit data is as an Excel workbook, which contains the data in the structure shown on the previous page. The Excel template can be downloaded from [kerbtier.de](http://kerbtier.de). This method is best suited for professionals, which have a large number of well-determined specimen and would like to submit a larger number of records.



Download

#### 4.2.3 Online via our ID request module

This method is best suited for all hobbyists and laypersons, who would like to have their findings identified or validated by our expert team. You can upload up to three photos of a beetle and capture the place and circumstances of discovery online here:

<https://www.kerbtier.de/cgi-bin/enSnapSubmit.cgi>

Our team answers the requests usually within a few hours and releases the result here:

<https://www.kerbtier.de/cgi-bin/enSnapView.cgi>






## 5 Working with the German ordnance map TK25

All records in the kerkbtier.de map module are normalized to the grid of the German ordnance map 1:25.000 (TK 25), formerly known as “Messtischblatt”.

A map sheet of the ordnance map is approximately 10 x 10 km in size. All map sheets have a unique number and bear the name of the main city within the map sheet. The normalization offers several advantages:

- A grid of 10 x 10 km is sufficient for general-purpose faunistics
- The number of required records in the database is limited, hence is easier to handle
- For very rare and endangered species, the exact place of discovery is not disclosed

To submit a beetle record to the kerkbtier.de faunistics database, the map sheet number of the place of discovery is required. The latter can be easily determined with a interactive map module. Just click the context button .

Alternatively, you may also use the map module directly in dynamic mode:

<http://www.kerkbtier.de/cgi-bin/enFundort.cgi?SortMode=4>



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- (1) Search for cities and villages, map sheet numbers and geographical coordinates (latitude, longitude formatted as "49.483384, 8.386600")
- (2) Extended map functions and saving of user preferences
- (3) Toggle map or satellite image display
- (4) Zoom function
- (5) Click the place of the discovery. A blue rectangle shows the corresponding map sheet
- (6) Name and number of the marked map sheet, as well as elevation ASL and geographic coordinates

1

Search:   Aggregation: TK 25 Preferences:

5514 Hadamar (HS) 137 m 50.437464° N 8.036442° E

Karte

Matching species: 73

<i>Bembidion striatum</i>	4
<i>Bembidion foraminosum</i>	3
<i>Bembidion argenteolum</i>	13
<i>Bembidion velox</i>	11
<i>Bembidion litorale</i>	6
<i>Bembidion pygmaeum</i>	11
<i>Bembidion nigricorne</i>	5
<i>Bembidion lampros</i>	103
<i>Bembidion properans</i>	59
<i>Bembidion punctulatum</i>	43
<i>Bembidion pallidipenne</i>	4
<i>Bembidion bipunctatum</i>	5
<i>Bembidion ruficollis</i>	3
<i>Bembidion dentellum</i>	54
<i>Bembidion obliquum</i>	19
<i>Bembidion varium</i>	45
<i>Bembidion semipunctatum</i>	34
<i>Bembidion ephippium</i>	2
<i>Bembidion prasinum</i>	5
<i>Bembidion tibiale</i>	24
<i>Bembidion geniculatum</i>	10
<i>Bembidion atrocaeruleum</i>	15
<i>Bembidion varicolor</i>	14
<i>Bembidion conforme</i>	4
<i>Bembidion fasciolatum</i>	15
<i>Bembidion ascendens</i>	5
<i>Bembidion monticola</i>	11
<i>Bembidion deletum</i>	37
<i>Bembidion incognitum</i>	3
<i>Bembidion stephensii</i>	12
<i>Bembidion milleri</i>	6
<i>Bembidion lunatum</i>	2
<i>Bembidion bruxellense</i>	11
<i>Bembidion maritimum</i>	1
<i>Bembidion tetracolum</i>	114
<i>Bembidion cruciatum</i>	4
<i>Bembidion femoratum</i>	57

Latest record: ☐ < 1990 ☒ 1990–1999 ☐ 2000–2009 ☐ 2010–2019 ☐ from inquiry module (clickable)



## 6 Closing remarks

I hope that the kerkbtier.de map module will attract many users and even more so many contributors, who volunteer to add their records to the database.

The project is designed as a long-term joint project. Roughly 8 years after its start (status: 11.11.2018), still some limitations apply and should be kept in mind:

- The database contains approx. 4,466 species, hence it covers about 65% of the German beetle fauna.
- The currently available 142,914 records are far from sufficient to provide a representative picture of the distribution of a species in Germany. However, the situation will hopefully improve over time, as more users volunteer to contribute their data.

That's why, let me mention it once more: Join in!

Any feedback of the users which helps to improve this functionality is highly welcome.

The best way to send your feedback is via the contact form at <http://www.kerkbtier.de/cgi-bin/enKontakt.cgi>.





## 7 Revisions

16.10.2010	Initial version online on kerbtier.de
26.10.2010	Display of ordnance map sheet name and number in the map module
25.11.2010	Minor change in color code
19.02.2011	Minor improvements of the manual
28.05.2011	Minor update of the manual
05.01.2012	Minor update of the manual
15.02.2012	Incorrect links to the templates fixed
18.03.2012	Minor update of the manual
30.06.2012	Improved base map
28.12.2012	Further improvements in the base map
06.06.2013	TK25 module now displays also quadrants
17.10.2015	Complete revamp of all map functions on kerbtier.de
18.09.2016	Besides cities and map sheet numbers, geographical coordinates can be searched
11.06.2017	Names and borders of the administrative districts of Germany can be displayed in dynamic map mode
15.06.2017	Records coming from our inquiry module can be directly displayed by clicking the map marker
01.07.2017	Adaptation of the manual to the recent changes in website design
14.12.2017	Map module now shows the catalogue status from colkat.de
11.11.2018	Minor update of the manual
27.06.2020	WinWord recording template switched off