

From *Brachyiulus jawlowskii* Lohmander, 1928  
to *Brachyiulus bagnalli* (Brölemann, 1924)  
(Diplopoda: Julida: Julidae): a case of delayed label correction

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**Abstract.** *Brachyiulus bagnalli* (Brölemann, 1924) is recorded from Germany for the first time. The specimen was previously misidentified, the original provisional identification was inadvertently retained on the specimen label and published as *Brachyiulus jawlowskii* Lohmander, 1928. The species identity is here corrected. Notes on taxonomy, identification, distribution, and ecology of *B. bagnalli* are provided. The status of the species in Germany is discussed.

**Zusammenfassung.** Von *Brachyiulus jawlowskii* Lohmander, 1928 zu *Brachyiulus bagnalli* (Brölemann, 1924) (Diplopoda: Julida: Julidae): ein Fall einer verspäteten Korrektur der Etikettierung. *Brachyiulus bagnalli* (Brölemann, 1924) wurde erstmals für Deutschland nachgewiesen. Das Exemplar war zuvor fehlbestimmt worden; die ursprüngliche vorläufige Bestimmung wurde versehentlich auf dem Sammlungsetikett beibehalten und anschließend als *Brachyiulus jawlowskii* Lohmander, 1928 publiziert. Die Artzugehörigkeit wird hier korrigiert. Es werden Anmerkungen zur Taxonomie, Identifikation, Verbreitung und Ökologie von *B. bagnalli* gegeben. Der Status der Art in Deutschland wird diskutiert.

**Keywords.** Bavaria, Europe, first record, millipede, military training area.

## 1 Introduction

The julid species *Brachyiulus jawlowskii* Lohmander, 1928 was published by DECKER et al. (2025) as a first record for Germany based on one male specimen from Bavaria, along with four other diplopod taxa new for the German fauna. Although the specimen had already been correctly identified as *Brachyiulus bagnalli* (Brölemann, 1924) several years earlier, the label *B. jawlowskii*, originally intended as a first provisional identification in 2018, was inadvertently retained. As a result, the record was subsequently published under the incorrect species name *B. jawlowskii* later (DECKER et al. 2025).

We therefore correct the previously published record of *B. jawlowskii* to *B. bagnalli* and provide information on the taxonomy, distribution and ecology of the latter.

## 2 Results

### *Brachyiulus bagnalli* (Brölemann, 1924) - First record in Germany

**Material examined:** Bavaria, Landshut, Ochsenau, Nature Protection Area "Ehemaliger Standortübungsplatz Landshut mit Isarleite", sheep's fescue grassland, 48.5602°N, 12.2069°E, 10.VI.1994, pitfall traps, leg. O. Fischer-Leipold & D. Leipold, 1 ♂ (Senckenberg Museum of Natural History, VNR 018089-3).

In Germany, *B. bagnalli* has only been recorded once (as *B. jawlowskii* by DECKER et al. 2025) in Bavaria, in the Ochsenau, situated in the Isar Valley. The area was used for military purposes from 1880 to 1993/94. The finding location in the nature reserve 'Ehemaliger Standortübungsplatz Landshut mit Isarleite' is characterised as a very homogeneous dry calcareous meadow with low ground cover of the dominant sheep's fescue (*Festuca ovina*) which is surrounded by large sheep pasture (LEIPOLD & LORENZ 1995).

### Taxonomy

This taxon has a turbulent history of usage and names. Some authors used *Iulus* or *Brachyiulus pusillus* nec Leach, 1816 (e. g. LATZEL 1884, VERHOEFF 1898). Later, the name *Microbrachyiulus bagnalli* was introduced by BRÖLEMANN (1924) as nom. nov.

For more information on synonymy, taxonomy and more references see DZIADOSZ (1964a), VAGALINSKI & LAZÁNYI (2018), KORSÓS & LAZÁNYI (2020), and DECKER et al. (2026a).

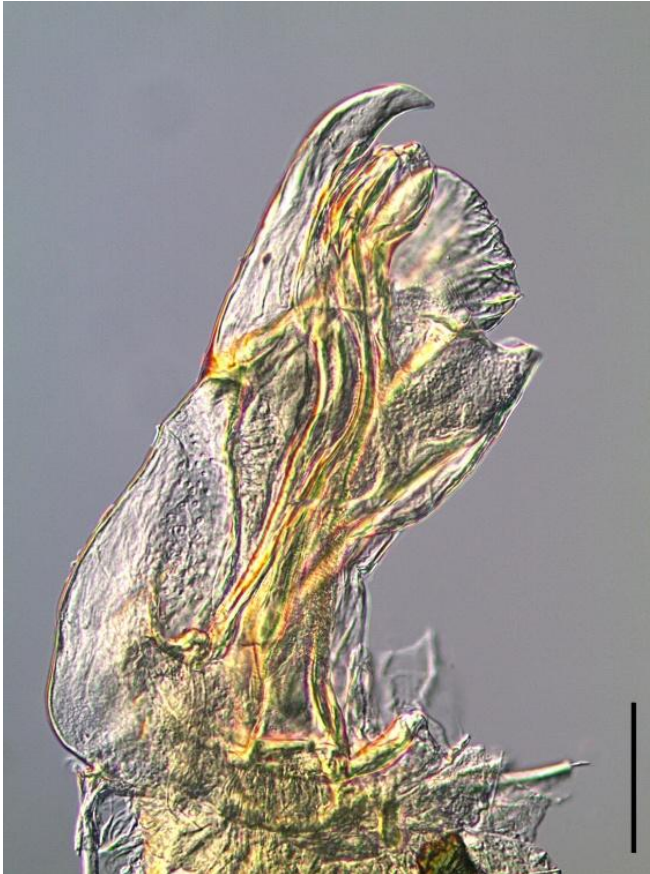
### Diagnosis and identification

*B. bagnalli* can be distinguished from *B. pusillus* (Bosc, 1792), the only other *Brachyiulus* species known to occur outdoors in Germany, as well as other congeners, by the morphology of male gonopods (Fig. 1), female vulvae, and female 2<sup>nd</sup> leg pair, but not by colouration or other external characters.

KORSÓS & LAZÁNYI (2020) provided SEM-images (figs 2-3) and drawings of male gonopods, both dissected and in situ (figs 8-9) comparing *B. bagnalli* with two other *Brachyiulus* species found in Hungary. According to VAGALINSKI & LAZÁNYI (2018) *B. bagnalli* differs from congeners by the opisthomerite bearing a relatively narrow lamellar lateral process, which is flattened or slightly convex apically, with only several distal furrows, and a thin, pointed, anterior process bent posteriad.

KORSÓS & LAZÁNYI (2020) illustrated, for the first time, differences in the vulvae and the second pair of female legs (figs 14–15) among the three species.

Further good descriptions are provided for *B. bagnalli* by LOKSA (1956, as *B. pusillus kaszabi* subsp. n., figs 5a-d, 6a-b; see also KORSÓS 1994), DZIADOSZ (1964a, figs 1-3a, b), STRASSER (1966, fig. 28), GULIČKA (1967, fig. 3), and KOCOUREK et al. (2017, figs 2-6).



**Figure 1:** Male *Brachyiulus bagnalli* (Brölemann, 1924) from Germany, left male gonopod, medial view. Scale bar = 100  $\mu$ m.

### Distribution

This is a widespread eastern and central European species, known from Bulgaria, the Czech Republic, Hungary, North Macedonia, Poland, Austria, Romania, Slovakia, Slovenia, and Serbia (KIME & ENGHOF 2017).

In neighbouring Czechia, *B. bagnalli* has been recorded across large parts of Bohemia and Moravia, with concentrations of records in northern and central Bohemia and in Moravia (KOCOUREK et al. 2023).

### Ecology

VERHOEFF (1898) characterised *B. bagnalli* (as *B. pusillus*) as a steppe species of Hungary. With more recent data (KORSÓS & LAZÁNYI 2020) it occurs in Hungary mostly in natural habitats, such as floodplains, willows, steppe, oak forests, but was also found, less commonly, in urban or peri-urban habitats, such as urban woodlands, parks and gardens.

In Romania, however, it prefers riparian forests with *Salix* and *Fraxinus*, particularly in the Danube Delta (CEUCA 1992; CEUCA & CEUCA 2005). The species has also been reported from the loess-covered steppe landscapes of the Dobruja (today in northeastern Bulgaria and eastern Romania) (STRASSER 1966; GIURGINCA 2021). DZIADOSZ (1964a, 1964b) reported the species from Poland (Puławy County), where it was found in a ravine in leaf litter and in a limestone quarry.

GULIČKA (1967) described the species as xerothermophilous and widespread in dry deciduous forests and scrubland, as well as in open agricultural landscapes of the lowlands of southern and eastern Slovakia. *B. bagnalli* is classified by KOCOUREK et al. (2023) for Czechia as an autochtone, frequent, adaptable species with preference for humid open to dark habitats with increasing records after 2018. The species occurs in synanthropic and semisynanthropic habitats, like e. g. in quarries, nurseries, gardens, near residential and agricultural buildings, in allotment gardens, vineyards, or on land reclaimed after coal mining. It is also often found in river valleys, along rivers and wetlands (KOCOUREK et al. 2017, 2023).

### 3 Discussion

Whether the Bavarian record of *B. bagnalli* represents an anthropogenic introduction, similar to those documented for other species in military training areas (HANNIG 2009) by military vehicles transferring large amounts of soil through Europe in the long history of this training area, or a natural population remains unclear.

Its occurrence in the dry grassland of the military training area is consistent with the ecological preferences of this xerothermophilic species, as observed in eastern and south-eastern Europe. The nearest ecologically similar records from Bohemia (see above) are located some 200 km to the north. However, the German and Czech records are separated by the mountain range Bohemian Forest, where the species has not yet been recorded, even though this region on the Czech side has been relatively well studied with regard to millipedes (KOCOUREK et al. 2023, TAJOWSKÝ 2001, 2002).

Further molecular and distribution data will reveal whether this species is native, archeobiotic or neobiotic in Germany. In the Red List of Threatened Diplopods for Germany (DECKER et al. 2026b) *B. bagnalli* is currently listed as a casual occurring species based on this single record from the wild and is therefore not included in the comprehensive species list of established and assessed taxa.

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