

A new Oribatid (*Acarina*) from Rocky Mountains.

By Marie Hammer.

During my visit to Canada in the summer of 1948 where I studied the microfauna of Arctic Canada, which investigation was financed by the Arctic Institute of North America I found in Rocky Mountains near Jasper railway station, 3470 feet a. s. l., in a vegetation of *Hordeum* sp. and grass on sand and gravel, an oribatid, which at first glance looked very much like a *Trichoribates*, but appeared to be a new genus.

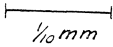
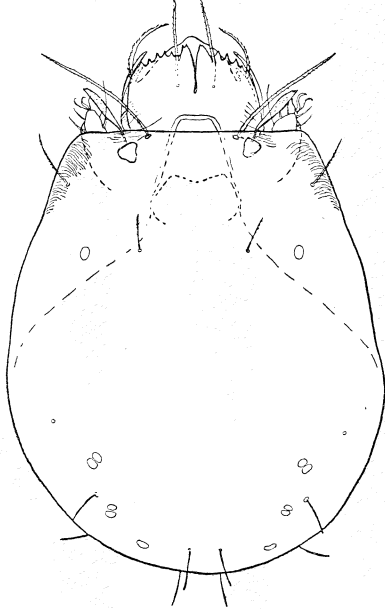
Dentizetes n. gen. is related to *Trichoribates*.

The cusps are very long and broad and only separated by a narrow space whereby the translamella becomes very short. On the foremost margin the cusps have several unequal, strong teeth. The lamellar hairs are inserted close together rather near the median plane. Tarsus has three claws of which the middlemost is the strongest.

Typical species: **Dentizetes rudentiger** n. sp.

The colour is dark brown, the length 0,56 mm, the breadth 0,40 mm. Proposoma is conical, very short, measuring only a little more than $\frac{1}{6}$ of the length of the whole specimen; it is almost one and a half times as broad as long. Rostrum broad, slightly tapering at the tip. The rostral hairs are inserted almost on the middle of propodosoma on the lateral sides, they reach with about half their length beyond the tip of rostrum. They are very thick and hairy. The lamellae reach almost to the tip of rostrum, they are very broad, broadest off the translamella. The innermost edge is thickened by a chitinous ridge. On the lateral part of the lamella fine stripes or wrinkles are to be seen. The cusps are especially well developed; they are broad blades with almost parallel sides, they are a little longer and just as broad as the lamellae. They almost touch each other medially. On the foremost edge there are a number of unequal, strong teeth, different on the two cusps, even as regards their number. The lamellar hairs are placed rather close together; they are inserted on the edge between the innermost teeth but reach far backwards inside the cusps. They are a little longer than the rostral hairs, parallel, strong and rough, of the

same thickness almost to the very tip and reach with most of their length beyond the tip of the rostrum. The translamella is very short but fairly broad. The interlamellar hairs are long rough setae, ropelike as the lamellar hairs and twice as long as the latter. They are placed below the anterior margin of hysterosoma on the bases of the lamellae close to the pseudostigmata and directed outwards and forwards. The pseudostigmatic organs are seen behind



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Fig. 1. *Dentizetes rudentiger* n. gen. n. sp.

the interlamellar hairs and have the same direction: forwards and laterally. They are inserted in cups which are concealed under the anterior margin of hysterosoma. The head is of almost the same length as the stalk which makes a bend outwards at the transition between the head and the stalk. The head is lanceolate, pointed at the tip and covered with fine setae. Tectp. I is well developed with a long free tip, which reaches a little beyond the anterior margin of the cusps. Seen from the surface it is a broad blade



with two blunt teeth on its anterior margin on the lateral side of which the rostral hair is placed; more ventrally there is a very strong and pointed tooth, half as long as the rostral hair, and close to the latter a smaller tooth. Also tectp. II is well developed (see fig. 6); unfortunately, the mandible was damaged a little during preparation, but figure 4 shows the shape. The maxilla is shown in fig. 5.

Hysterosoma is twice as long as broad at the anterior margin, it is broadest in the posterior third and at the end it is semi-circularly rounded. The integument is finely wrinkled or striped on the pteromorphae and in a depression just behind the pseudostigmatic organs. Medially in the anterior part there is a light spot. Only six pairs of thin hairs can be seen. They are arranged as shown in fig. 1. The hairs are provided with very fine setae. Areae porosae present; some of them are double with two light spots. Legs I—III are rather short and only very little of them can be seen except after preparation. Leg IV is a little more slender. Tarsus on all legs has three claws of which the middlemost is twice as thick as the two lateral ones. Genital plate twice as long as anal plate. They are separated by a space as long as the length of the genital plate.

Only one specimen (a female) was found.

Locality: Jasper railway station, Alberta. August 13, 1948, in *Hordeum* sp. and grass.

The generic name refers to the dentate cusps, the specific one to the rope-like lamellar and interlamellar hairs.

Fig. 2. Rostrum, lamellae with lamellar hairs and pseudostigmatic organs.

- „ 3. Tectp. I and rostral hair.
- „ 4. Mandible.
- „ 5. Maxilla.
- „ 6. Leg II and tectp. II.
- „ 7. Leg IV.