

The first occurrence of the genus *Tonkinella* Mansuy, 1916 in the Spanish Middle Cambrian

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The genus *Tonkinella* Mansuy, 1916 is a typical polimeroid trilobite in early Middle Cambrian rocks from Vietnam, Canada, U.S.A., India, Korea, Siberia and China. Here we refer a new finding of *T. aff. breviceps* Kobayashi, 1934 in the early Middle Cambrian of the Cantabrian Mountains (northern Spain).

The fossil studied herein has been recovered from the lowermost visible strata of the Oville Formation at the Presa del Porma section named "Pu" (León province). *Tonkinella* aff. *breviceps* has been found in the same level where the following trilobites species appear: *Eccaparadoxides asturianus* (Sdzuy, 1968), *Paradoxides? enormis* Sdzuy, 1968, *Acadolenus decorus* Sdzuy, 1968 and *Conocoryphe (Parabailiella) matutina* Sdzuy, 1968. The age of this assemblage is *E. asturianus* zone, which characterises the Upper Leonian in the Mediterranean biochronology. An Upper Leonian age for the specimens of *T. aff. breviceps* cited herein is also supported by the first record of *Badulesia tenera* (Hartt in Dawson, 1865), which is placed some 4 m above in the same succession. The FAD of this species marks the beginning of the Caesaraugustan Stage. The Leonian/Caesaraugustan boundary has been correlated with the base of *Triplagnostus gibbus* zone by Sdzuy *et al.* (1999).

For the moment, the most continuous record of *Tonkinella* has been found in the Great Basin of North America by Sundberg (1994). *T. breviceps* appears in the *Altiocculus* subzone (uppermost *Ehmaniella* zone) defined by Sundberg (op. cit.), and the findings of this species from other countries are of a similar age (Sundberg, 1994; Jell & Hughes, 1997). The level containing *T. aff. breviceps* in Spain can be correlated with a level just below the FAD of *Triplagnostus gibbus*.

In consequence, we correlate tentatively the level with *T. aff. breviceps* with the lower part of *Altiocculus* subzone, particularly with the levels previous to the *T. gibbus* FAD.

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