

## Opinion

# The type species of the genus *Salmonella* Lignieres 1900 is *Salmonella enterica* (ex Kauffmann and Edwards 1952) Le Minor and Popoff 1987, with the type strain LT2<sup>T</sup>, and conservation of the epithet *enterica* in *Salmonella enterica* over all earlier epithets that may be applied to this species. Opinion 80

Judicial Commission of the International Committee on Systematics of Prokaryotes

## Correspondence

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The Judicial Commission of the International Committee for Systematics of Prokaryotes has decided that the type species of the genus *Salmonella* Lignieres 1900 is *Salmonella enterica* (ex Kauffmann and Edwards 1952) Le Minor and Popoff 1987 and that the type strain of this species is strain LT2<sup>T</sup>. In addition, the epithet *enterica* in *Salmonella enterica* is conserved over all earlier epithets that may be applied to this species.

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With this Opinion, the Judicial Commission of the International Committee for Systematics of Prokaryotes decided in favour of a request by Euzéby (1999), to replace *Salmonella choleraesuis* (Smith 1894) Weldin 1927 with *Salmonella enterica* (ex Kauffmann and Edwards 1952) Le Minor and Popoff 1987 as the type species of the genus *Salmonella*. The type strain of *Salmonella enterica* is by decision of the Judicial Commission strain LT2<sup>T</sup>, also known under the designations CIP 60.62<sup>T</sup>, ATCC 43971<sup>T</sup>, NCIMB 11450<sup>T</sup> and NCTC 12416<sup>T</sup>. The description of *Salmonella enterica* is given by Le Minor & Popoff (1987). In addition, the epithet *enterica* in *Salmonella enterica* is conserved over all earlier epithets that may be applied to this species.

This action automatically creates the new subspecies *Salmonella enterica* subsp. *enterica* Le Minor and Popoff 1987 and the new combinations *Salmonella enterica* subsp. *arizonae* (Le Minor *et al.* 1985) Le Minor and Popoff 1987, *Salmonella enterica* subsp. *bongori* (Le Minor *et al.* 1985) Le Minor and Popoff 1987, *Salmonella enterica* subsp. *diarizonae* (Le Minor *et al.* 1985) Le Minor and Popoff 1987, *Salmonella enterica* subsp. *houtenae* (Le Minor *et al.* 1985) Le Minor and Popoff 1987, *Salmonella enterica* subsp. *indica* (Le Minor *et al.* 1987) Le Minor and Popoff 1987 and

*Salmonella enterica* subsp. *salamae* (Le Minor *et al.* 1985) Le Minor and Popoff 1987. The description of *Salmonella enterica* subsp. *enterica* Le Minor and Popoff 1987 is identical to that given by Le Minor & Popoff (1987) for *Salmonella enterica* Le Minor and Popoff 1987, while the descriptions of the remaining subspecies are given by Le Minor *et al.* (1982). The type strains of these subspecies are:

*Salmonella enterica* subsp. *enterica* (ex Kauffmann and Edwards 1952) Le Minor and Popoff 1987 type strain CIP 60.62 = NCIMB 11450 = LT2 = ATCC 43971 = NCTC 12416,

*Salmonella enterica* subsp. *arizonae* (Borman 1957) Le Minor and Popoff 1987 type strain ATCC 13314 = CCUG 6322 = CIP 82.30 = DSM 9386 = NCTC 8297,

*Salmonella enterica* subsp. *bongori* (Le Minor *et al.* 1985) Le Minor and Popoff 1987 type strain ATCC 43975 = CCUG 30042 = CIP 82.33 = DSM 13772 = NCTC 12419,

*Salmonella enterica* subsp. *diarizonae* (Le Minor *et al.* 1985) Le Minor and Popoff 1987 type strain ATCC 43973 = CCUG 30040 = CIP 82.31 = NCTC 10060,

*Salmonella enterica* subsp. *houtenae* (Le Minor *et al.* 1985) Le Minor and Popoff 1987 type strain ATCC 43974 = CCUG 30041 = CIP 82.32 = DSM 9221 = NCTC 12418,

*Salmonella enterica* subsp. *indica* (Le Minor *et al.* 1987) Le Minor and Popoff 1987 type strain K1240 = ATCC 43976 = CCUG 30038 = CIP 102501 = NCTC 12420,

*Salmonella enterica* subsp. *salamae* (Le Minor *et al.* 1985)

Le Minor and Popoff 1987 type strain ATCC 43972 = CCUG 30039 = CIP 8229 = DSM 9220 = NCTC 5773.

In issuing this Opinion, the Judicial Commission has also been able to take into consideration the original Request for an Opinion by Le Minor & Popoff (1987), which was incorrectly formulated and on which the Judicial Commission was unable to act.

The arguments of Yabuuchi & Ezaki (2000) against Euzéby's request (Euzéby, 1999) were carefully discussed. The Judicial Commission stated that the term 'neotype species' does not have standing in nomenclature. The publication of this Opinion also effectively indicates that the Judicial Commission has not granted the requests to conserve a number of epithets in the genus *Salmonella*, as submitted by Ezaki *et al.* (2000a, b). The Judicial Commission noted that these names have standing in nomenclature and that a name (epithet) can only be conserved over another name (epithet) or in combination with a particular circumscription.

The Judicial Commission is aware that this Opinion has consequences for the nomenclature and taxonomy of this group of organisms. While the Judicial Commission can rule on matters of nomenclature, it does not have the authority to rule on matters of taxonomy. Such authority would be in direct conflict with Principle 1, as emended at the meetings of the Judicial Commission and ICSB in Sydney (De Vos & Trüper, 2000; Labeda, 2000). However, the nomenclatural and taxonomic consequences of this Opinion are of great importance, and experts in the field of nomenclature and taxonomy have written an accompanying commentary that should help the reader to interpret both the nomenclatural and taxonomic consequences of this Opinion (Tindall *et al.*, 2005).

Opinion compiled on behalf of the Judicial Commission by H. G. Trüper and B. J. Tindall.

## References

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