Taxonomic Note

Proposal of Yaniellaceae fam. nov., Yaniella gen. nov. and Sinobaca gen. nov. as replacements for the illegitimate prokaryotic names Yaniaceae Li et al. 2005, Yania Li et al. 2004, emend Li et al. 2005, and Sinococcus Li et al. 2006, respectively

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The prokaryotic generic names Yania Li et al. 2004 and Sinococcus Li et al. 2006 are illegitimate because they are later homonyms of the names Yania Roewer 1919 (Opiliones, Arachnida, Arthropoda, Animalia), Yania Huang 1997 (Lepidoptera: Hesperiidae) and Sinococcus Wu and Zheng 2000 (Homoptera: Coccomorpha) [Principle 2 of the Bacteriological Code (1990 Revision)]. Therefore, new generic names, Yaniella gen. nov. and Sinobaca gen. nov., are proposed for these taxa. In addition, a new family name, Yaniellaceae fam. nov., is proposed to accommodate Yaniella gen. nov. As a result, new combinations are required for the species to replace the illegitimate species names.

On 14 August 1999, the Judicial Commission (De Vos & Trüper, 2000) recommended that the change in wording of Principle 2 proposed by Tindall (1999) be accepted, with modifications:

‘The nomenclature of Prokaryotes is not independent of botanical and zoological nomenclature. When naming new taxa in the rank of genus or higher, due consideration is to be given to avoiding names which are regulated by the Zoological Code and the International Code of Botanical Nomenclature’.

Further, the addition of the following Note to Principle 2 was proposed:

‘Note. This principle takes effect with publication of acceptance of this change by the ICSB and is not retroactive’.

Later, the ICSB (International Committee on Systematic Bacteriology, now the International Committee on Systematics of Prokaryotes) voted unanimously in favour of this proposal (Labeda, 2000).

The minutes of the meetings of the Judicial Commission and the minutes of the meetings of the ICSB were published in the November 2000 issue of the IJSEM and, for all practical purposes, the new Principle 2 applies from 1 January 2001.

Li et al. (2004) published the description of a new taxon Yania halotolerans gen. nov., sp. nov., a novel member of the suborder Micrococccineae, isolated from a saline soil sample in China. Subsequently, a new family, Yaniaceae fam. nov., was proposed to accommodate the genus Yania (Li et al., 2005) and a novel species, Yania flava, was included in the genus. Sinococcus qinghaiensis gen. nov., sp. nov., was proposed to represent a novel member of the order Bacillales (Li et al., 2006). Recently, the names Yania and Sinococcus were proved to be illegitimate because of the precedence of the genus names Yania Roewer 1919 (Opiliones, Arachnida, Arthropoda, Animalia), Yania Huang 1997 (Lepidoptera: Hesperiidae; Huang, 1997) and Sinococcus Wu and Zheng 2000 (Homoptera: Coccomorpha; Wu & Zheng, 2000) [Index to Organism Names (Thomson BIOSIS) at http://www.organismnames.com].

The illegitimate genus name Yania was chosen to honour Xun-Chu Yan (1912–1994), a Chinese microbiologist who devoted his life to the study of actinomycete taxonomy and antibiotics. The replacement genus name, Yaniella, was also chosen to honour him. As a result, the family Yaniaceae was replaced by Yaniellaceae. The illegitimate genus name Sinococcus indicated that this coccus-shaped microbe was isolated from locations in China. The replacement genus name, Sinobaca, was also
chosen to express similar meanings. There is no indication that the taxon names Yaniellaceae, Yania and Sinobaca have been used previously to designate taxa of bacteria, protists, algae, fungi, plants or viruses. The primary resources for searching the botanical and the zoological names were: Index Nominum Genericorum (ING) Plantarum (http://ravenel.si.edu/botany/ING/INGForm.cfm), Names in Current Use for Extant Plant Genera (NCU) (http://www.bgbm.fu-berlin.de/iapt/ncu/genera/Default.htm), algaeBASE (http://www.algaebase.org/) and Index of Organism Names (Thomson) (http://www.organismnames.com).

According to Principle 6 of the Bacteriological Code (1990 Revision) (Lapage et al., 1992), the correct name of a taxon is based upon valid publication, legitimacy and priority of publication. An illegitimate name cannot be a correct name and must be replaced. The fact that the generic name is illegitimate does not affect the legitimacy of the species epithets (Rule 32b and Rule 51a). As a result, reference to the authors of the species epithet has been retained in the authorship of the resulting new combination (Rule 54).

**Description of Yaniella gen. nov.**

*Yaniella* [Ya.ni.el’la. N.L. fem. dim. n. *Yaniella* named after Xun-Chu Yan (1912–1994), a Chinese microbiologist who devoted his life to the study of actinomycete taxonomy and antibiotics].

Previous illegitimate name: *Yania* Li et al. 2004.

The description of the genus is as given for *Yania* in Li et al. (2004) and in Li et al. (2005). The type species is *Yaniella halotolerans* (Li et al., 2004).

**Description of Yaniella halotolerans comb. nov.**

*Yaniella halotolerans* (ha.lo.to.le.rans. Gr. n. hals salt; L. pres. part. tolerans tolerating; N.L. part. adj. halotolerans referring to the organism’s ability to tolerate high salt concentrations).


The description of the species is as given for *Yaniella halotolerans* in Li et al. (2004). The type strain is YIM 70085T (=CCTCC AA001023T=DSM 15476T=JCM 13527T).

**Description of Yaniella flavă comb. nov.**

*Yaniella flavă* (fla’va. L. fem. adj. flavă golden yellow, referring to the colour of the colonies).


The description of the species is as given for *Yania flavă* in Li et al. (2005). The type strain is YIM 70178T (=DSM 16377T=KCTC 19047T=JCM 13595T).

**Description of Yaniellaceae fam. nov.**

Yaniellaceae (Ya.ni.el.la.ce.ace. N.L. fem. dim. n. *Yaniella* type genus of the family; -aceae ending to denote a family; N.L. fem. dim. pl. n. *Yaniellaceae* the *Yaniella* family).

Previous illegitimate name: *Yaniaceae* Li et al. 2005.

The description of the family is as given for *Yaniaceae* in Li et al. (2005). The type genus is *Yaniella*.

**Description of Sinobaca gen. nov.**

Sinobaca (Si.no.ba’ca. M.L. n. *Sina* China; L. fem. n. *baca* a grain or berry, and in bacteriology a coccus; N.L. fem. n. *Sinobaca* coccus-shaped microbe isolated from places in China).

Previous illegitimate name: *Sinococcus* Li et al. 2006.

The description of the genus is as given for *Sinococcus* in Li et al. (2006). The type species is *Sinobaca qinghaiensis* (Li et al., 2006).

**Description of Sinobaca qinghaiensis comb. nov.**

Sinobaca qinghaiensis (qing.hai.en’sis. N.L. fem. adj. qinghaiensis pertaining to Qinghai, a province of north-west China).

Illegitimate homotypic synonym: *Sinococcus qinghaiensis* Li et al. 2006.

The description of the species is as given for *Sinococcus qinghaiensis* in Li et al. (2006). The type strain is YIM 70212T (=KCTC 3943T=DSM 17008T).

**REFERENCES**


