

DESIGNATION OF THE TYPE STRAIN OF
PEDIOCOCCLUS PARVULUS GÜNTHER AND WHITE

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SUMMARY. Strain S-182 of the authors' collection has been deposited by the authors as the type strain (type culture) of Pediococcus parvulus Günther and White in the National Collection of Dairy Organisms, National Institute for Research in Dairying, Shinfield, Nr. Reading, Berkshire, England.

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Günther and White (1961a, 1961b) proposed Pediococcus parvulus as the name of a new species but did not designate a type culture (strain). The authors have selected their strain S-182 as the type strain of the species. This strain has been deposited as the type strain in the National Collection of Dairy Organisms, National Institute for Research in Dairying, Shinfield, Nr. Reading, Berkshire, England.

Description of Type Strain S-182 of
Pediococcus parvulus Günther and White 1961

Morphology and Staining Reaction

Spherical organisms, occasionally ovoid, ranging in diameter from 0.71 μ to 1.43 μ , arranged in clusters, tetrads, pairs or singly, nonmotile, nonspore-forming and not encapsulated. Strongly Gram-positive.

Cultural Characters

Surface colonies on tomato juice (TJ) agar (Oxoid, adjusted to pH 6.6) are greyish-white, smooth, circular, low convex with entire margins, size varying between 0.3 and 0.4 mm in diameter. Growth in TJ agar stab culture is beaded throughout the entire length of the stab, with a small amount of surface growth. Mucoïd colonies are not formed on TJ agar medium containing a final concentration of 5%

sucrose. There is abundant growth in TJ broth after 48 hr incubation. Growth in all media tested much improved by the addition of sorbitan mono-oleate, (Tween 80).

Growth Conditions

Facultative anaerobe. Optimum temperature 30° C. Growth at 10° C and 40° C, not at 45° C. Able to initiate growth at pH 4.2 after 48 hr incubation. Growth in the presence of 4% but not 6.5% NaCl. Growth in the presence of 0.01%, 0.05% and 0.1% teepol. Final pH in glucose Yeastrel broth 5.3.

Biochemical Characters

Catalase negative. No haemolysis on horse blood agar. Aesculin hydrolysed slowly. Gelatin not liquefied. No reduction of nitrate to nitrite or nitrogen gas. No growth observed in media containing ammonium salts as sole nitrogen source. No production of carbon dioxide from glucose. Does not produce acetylmethylcarbinol dioxide from glucose or lactose. Acid from glucose, fructose and maltose. No acid from arabinose, xylose, lactose, sucrose, trehalose, raffinose, inulin, dextrin, glycerol, mannitol or sorbitol. Variable reaction with salicin.

Serology

An antiserum may be prepared which will react with homologous and heterologous extracts of our physiological group II (P. parvulus), and also with extracts of some pediococci belonging to our physiological group I (P. cerevisiae).

REFERENCES

- Günther, H.L. and H.R. White, 1961a. The cultural and physiological characters of the pediococci. Jour. Gen. Microbiol. 26:185.
____ and _____. 1961b. Serological characters of the pediococci. Jour. Gen. Microbiol. 26:199.