

抄 録

ブドウ酒醸造におけるポリリン酸塩の利用について

榎田忠衛, 丸山智章: 農産技研誌 7, 209 (1960)

Tadae KUSHIDA and Chiaki MARUYAMA: The Use of Poly-phosphate in Wine-making. J. Utiliz. Agr. Prod., 7, 206 (1960)

市販のポリリン酸塩(日本オルガノ商会のカルゴンFG)を使用して白ブドウ酒(甲州種)を比較醸造し, また赤ブドウ酒(Muscat Bailey A)に添加して貯蔵試験を実施し次の結果を得た。

1) ポリリン酸塩の緩衝作用によって酒液のpHが上昇される。その結果, 0.3%のカルゴン添加によって果醪の主発酵は促進され, またブドウ酒の熟成に関係深いマロラクチック発酵が刺激されて, 酒質により変化を与える。

2) ポリリン酸塩の酒石析出防止作用によ

て, 酒中に残存する酒石量が多くなり, エキスと総酸の多いブドウ酒がつくられる。また透明な赤ブドウ酒に0.1%のカルゴンを添加して貯蔵する場合には酒石の析出を完全に防止できるが, 一方蛋白質様の沈澱を増加する傾向がある。

3) ポリリン酸塩を添加したブドウ酒の色調は白酒では濃くなり, 赤酒では淡くなり, 風味は一般に酸味の温和な, コクのあるものとなる。この際香気の変化は殆んど認められない。

土壤中における放線菌の分布

(第4報) *Microbispora* 属の分離及び分類

(第5報) *Streptosporangium* 属の分離及び分類

野々村英夫, 小原 巖: 発酵工学 38, 401; 405 (1960)

Hideo NONOMURA and Yuwao OHARA: Distribution of Actinomycetes in the Soil (IV-V) The Genus *Microbispora* and the Genus *Streptosporangium*, J.

Ferm. Tech., Japan, 38, 401; 405 (1960)

Actinomycetes belonging to the genus *Microbispora* Nonomura et Ohara (syn. *Waksmania* Lechevalier et Lechevalier), and the genus *Streptosporangium* Couch were isolated from the soils of various places in Japan.

The taxonomic properties of the isolates were studied and they were classified to the species of each genus. The following new species and varieties were described; *Microbispora amethystogenes*, *M. amethysto-*

genes var. *nonreducans*, *M. parva*, *M. chromogenes*, *M. diastatica*, *M. rosea* var. *nonnitritogenes*, *Streptosporangium album*, *S. viridialbum*, *S. amethystogenes*, *S. vulgare*.

These actinomycetes appeared preferably around a bit of soil which was deposited on the SKINNER'S soil extract agar plated in a petri dish, after a few weeks incubation at 30°C.

All strains studied required thiamine essentially and some of them biotin essentially

or secondarily. In both genera there were some antibiotic strains, and strains producing violet crystals of pigment—water insoluble and benzene soluble—abundantly on or in some agar media. In morphological properties, there was not so great difference among the species within each of these

genera as in genus *Streptomyces* Waksman et Henrici. This may support the opinion to separate *Streptomyces* into certain taxa more morphologically defined.

The following keys have been presented in the paper;

(a) *Key to the species of the Genus Microbispora*

- I. Violet crystals of pigment abundant on Oatmeal agar ;
no or very poor growth on Glycerine agar.
 - A. Nitrites produced from nitrates.
 1. *M. amethystogenes* nov. sp.
 - B. Nitrites not produced from nitrates.
 - 1a. *M. amethystogenes* var. *nonreducans* nov. var.
- II. Violet crystals of pigment little to trace and poor growth on Oatmeal agar ;
moderate growth on Glycerine agar.
 2. *M. parva* nov. sp.
- III. No violet crystals of pigment on any medium ;
moderate growth on Glycerine agar.
 - A. Soluble pigment dark yellowish gray to pale purple in Oatmeal agar-Y.*
 3. *M. chromogenes* nov. sp.
 - B. Soluble pigment not produced or pale yellow in Oatmeal agar-Y.*
 1. Starch hydrolysed.
 4. *M. diastatica* nov. sp.
 2. Starch not hydrolysed.
 - a. Nitrites produced from nitrates.
 5. *M. rosea* Nonomura et Ohara
 - b. Nitrites not produced from nitrates.
 - 5a. *M. rosea* var. *nonnitritogenes* nov. var.

(b) *Key to the species of the genus Streptosporangium*

- I. Aerial mycelium—spore in mass—white.
 1. *S. album* nov. sp.
- II. Aerial mycelium greenish white or yellowish gray.
 2. *S. viridialbum* nov. sp.
- III. Aerial mycelium pale pink to pink.
 - A. Purple soluble pigment produced in Oatmeal agar-Y.*
 3. *S. roseum* Couch
 - B. No typical soluble pigment or pale yellow to yellow in Oatmeal agar-Y.*

- a. Violet crystals of pigment produced on Oatmeal agar-Y.*
 - 4. *S. amethystogenes* nov. sp.
- b. No violet crystal of pigment produced on any medium.
 - 5. *S. vulgare* nov. sp.

(* Y, signifies the addition of yeast extract)