

[First Reprint]

SENATE, No. 1729

STATE OF NEW JERSEY
218th LEGISLATURE

INTRODUCED FEBRUARY 5, 2018

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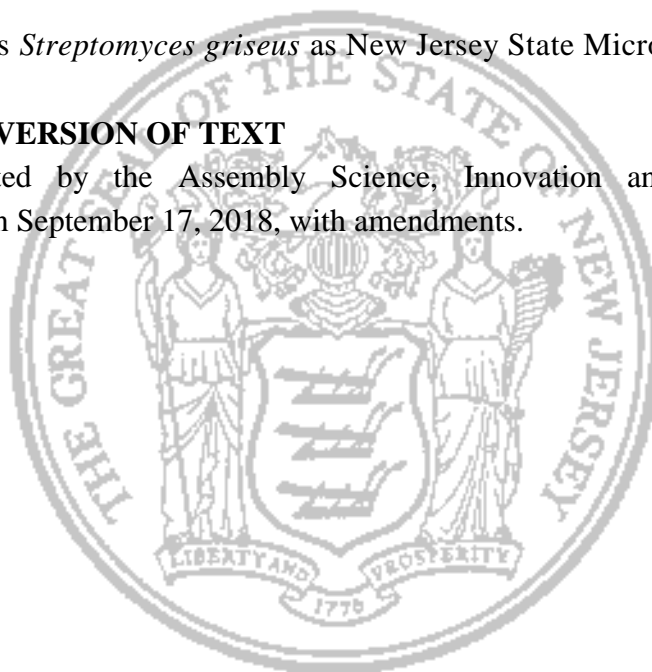
Senators Gopal, Diegnan, Assemblyman Houghtaling, Assemblywoman Downey, Assemblymen Dancer, Conaway and Mukherji

SYNOPSIS

Designates *Streptomyces griseus* as New Jersey State Microbe.

CURRENT VERSION OF TEXT

As reported by the Assembly Science, Innovation and Technology Committee on September 17, 2018, with amendments.



(Sponsorship Updated As Of: 2/26/2019)

- 1 AN ACT designating *Streptomyces griseus* as the New Jersey State
2 Microbe¹**[.]**¹ and supplementing chapter 9A of Title 52 of the
3 Revised Statutes.
4
- 5 **WHEREAS**, *Streptomyces griseus* is a soil-based microorganism that
6 was first discovered in ¹New Jersey in¹ 1916 by Dr. Selman
7 Waksman and Dr. Roland Curtis; and
- 8 **WHEREAS**, Soon after its discovery, the microbe drew international
9 acclaim for its groundbreaking use as an antibiotic; and
- 10 **WHEREAS**, In 1943, a research team from Rutgers University, led by
11 ¹**[Dr. Albert Schatz and]**¹ Dr. ¹**[Selman]**¹ Waksman ¹with Albert
12 Schatz and Elizabeth Bugie¹, used *Streptomyces griseus* to create
13 streptomycin, the world’s first antibiotic for tuberculosis; and
- 14 **WHEREAS**, The original discovery paper for streptomycin, entitled
15 “Streptomycin, a Substance Exhibiting Antibiotic Activity Against
16 Gram-Positive and Gram-Negative Bacteria,” was co-authored by
17 Dr. Waksman, Dr. Schatz, and Elizabeth Bugie, and published in
18 the Proceedings of the Society for Experimental Biology and
19 Medicine; and
- 20 **WHEREAS**, After clinical trials showed that streptomycin cured ailing
21 tuberculosis patients, Merck & Company, a New Jersey-based
22 pharmaceutical company, quickly made the drug available to the
23 public; and
- 24 **WHEREAS**, Prior to this discovery, tuberculosis was one of the
25 deadliest diseases in human history and the second leading cause of
26 death in the United States; and
- 27 **WHEREAS**, Within ¹**[ten]** 10¹ years of streptomycin’s release,
28 tuberculosis mortality rates in the U.S. fell to a historic low, with
29 only 9.1 tuberculosis-related deaths per 100,000 people in 1955
30 compared to the rate of 194 deaths per 100,000 people in 1900; and
- 31 **WHEREAS**, According to a June 1947 *New York Times* article,
32 streptomycin had “become one of the two wonder drugs of
33 medicine” and offered the “promise to save more lives than were
34 lost in both World Wars”; and
- 35 **WHEREAS**, Dr. ¹**[Selman]**¹ Waksman was later awarded a Nobel
36 Prize for Medicine and Physiology in 1952 for his work in
37 discovering *Streptomyces griseus*, creating streptomycin, and
38 curing tuberculosis; and
- 39 **WHEREAS**, *Streptomyces griseus* and streptomycin were two of the
40 most consequential discoveries in the fields of biology and
41 pharmacology during the twentieth century; and
- 42 **WHEREAS**, The unlocking of the antibiotic potential of *Streptomyces*
43 *griseus* is a testament to the hard work and tenacity that changed
44 the world; and

EXPLANATION – Matter enclosed in bold-faced brackets **[thus]** in the above bill is not enacted and is intended to be omitted in the law.

Matter underlined thus is new matter.

Matter enclosed in superscript numerals has been adopted as follows:

¹Assembly AST committee amendments adopted September 17, 2018.

1 **WHEREAS**, Few people are aware of the enduring social value of
2 Schatz ¹, Bugie,¹ and Waksman's research, as penicillin has
3 overshadowed streptomycin as the twentieth century's greatest
4 antibiotic discovery; and

5 **WHEREAS**, It is altogether fitting and proper to renew the public's
6 awareness of this historic achievement, and New Jersey's role in
7 combating tuberculosis, by designating *Streptomyces griseus* as the
8 official microbe of the State of New Jersey; now, therefore,

9
10 **BE IT ENACTED** *by the Senate and General Assembly of the State*
11 *of New Jersey:*

- 12
13 1. *Streptomyces griseus* is designated as the New Jersey State
14 Microbe.
15
16 2. This act shall take effect immediately.