

ASSEMBLY, No. 3650

STATE OF NEW JERSEY

218th LEGISLATURE

INTRODUCED MARCH 12, 2018

Sponsored by:

Assemblywoman ANNETTE QUIJANO

District 20 (Union)

Assemblywoman PATRICIA EGAN JONES

District 5 (Camden and Gloucester)

Assemblyman ARTHUR BARCLAY

District 5 (Camden and Gloucester)

Co-Sponsored by:

**Assemblyman Houghtaling, Assemblywoman Downey, Assemblymen
Dancer and Conaway**

SYNOPSIS

Designates Streptomyces Griseus as New Jersey State Microbe.

CURRENT VERSION OF TEXT

As introduced.



(Sponsorship Updated As Of: 5/25/2018)

1 **AN ACT** designating *Streptomyces Griseus* as the New Jersey State
2 Microbe, 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 New Jersey in 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 Dr. Selman Waksman with Albert Schatz and Elizabeth Bugie, used
12 *Streptomyces Griseus* to create streptomycin, the world’s first
13 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 ten years of streptomycin’s release, tuberculosis
28 mortality rates in the U.S. fell to a historic low, with only 9.1
29 tuberculosis-related deaths per 100,000 people in 1955 compared to
30 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. Selman Waksman was later awarded a Nobel Prize for
36 Medicine and Physiology in 1952 for his work in discovering
37 *Streptomyces Griseus*, creating streptomycin, and curing
38 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

45 **WHEREAS**, Few people are aware of the enduring social value of
46 Schatz, Bugie, and Waksman’s research, as penicillin has
47 overshadowed streptomycin as the twentieth century’s greatest
48 antibiotic discovery; and

6 **BE IT ENACTED** *by the Senate and General Assembly of the State of*
7 *New Jersey:*

12 2. This act shall take effect immediately.

Although *Streptomyces Griseus* and streptomycin were two of the most consequential discoveries of the twentieth century, few people remember these historical accomplishments or the distinguished New Jerseyans who helped cure the deadliest disease of their age. Designating *Streptomyces Griseus* as the official microbe of New Jersey will raise public awareness of this great achievement.