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A COLLECTION OF PAPERS

on

PART 1. Antibiotics of Australian Plants and Fungi.

PART 2. Australian Salmonellas and Their Bacteriophages.

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PAPER
NO.

P A R T O N E

ANTIBIOTICS OF AUSTRALIAN PLANTS AND FUNGI.

INTRODUCTION

Antibacterial Substances from Moulds:

1. Antibacterial Substances Produced by Microorganisms, with Special Reference to those Produced by Moulds. Med. J. Aust., (1943) p.359.

Antibacterial Substances Produced by Moulds:

2. 1. Penicidin, a product of the growth of a *Penicillium*. Aust. J. exp. Biol., (1942) 20, p.237.
3. 2. The antibacterial substances produced by some common *Penicillia*. Aust. J. exp. Biol., (1943) 21, p.15..
4. 3. The detection and estimation of antibacterial activity in vitro. Aust. J. exp. Biol., (1943) 21, p.127.
5. 4. The detection and occurrence of suppressors of penicidin activity. Aust. J. exp. Biol., (1943) 21, p.249.
6. 5. The mechanism of the action of some penicidin suppressors. Aust. J. exp. Biol., (1943) 21, p.255.
7. 6. The production of crystalline penicidin. Aust. J. exp. Biol., (1944) 22, p.223.
8. 7. The activity of a further group of Australian strains of *Penicillium* and *Aspergillus*. Aust. J. exp. Biol., (1944) 22, p.227.

Antibacterial Substances from fungi:

9. Toadstools and Mushrooms as a Source of Antibacterial Substances Active Against *Mycobacterium phlei* and *Bact. typhosum*. Nature, (1946) 157, p.441.

Antibacterial Activity in Members of the Higher Fungi:

10. 1. *Cortinarius rotundisporus* and *Psalliota xanthoderma* Genev. Aust. J. exp. Biol., (1946) 24, p.169.
11. Psalliotin, the Antibiotic of *Psalliota xanthoderma*. Nature, (1954) 174, p.598.

Antibacterial Activity in Members of the Higher Fungi:

12. 2. Psalliotin, the antibiotic of *Psalliota xanthoderma*. Aust. J. exp. Biol., (1955) 33, p.237.
13. 3. Antibacterial and antiphage tests with psalliotin. Aust. J. exp. Biol., (1955) 33, p.331.
14. 4. Unpublished results of examination of ~~400~~ species.
15. Provisional specification for the invention entitled "An antibiotic obtainable from *Psalliota xanthoderma*."

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No.

Antibacterial Substances from fungi (Contd.):

16. Antibiotics in Australian Plants and Fungi. Med. J. Aust., (1949) p.505.

Antibacterial Substances from Plants:

17. Antibacterial Activity in Members of the Native Australian Flora. Nature, (1946) 158, p.876.

Antibacterial Substances Produced by Flowering Plants:

18. 1. Preliminary survey. Aust. J. exp. Biol., (1946) 24, p.49.
19. 2. The antibacterial action of essential oils from some Australian plants. Aust. J. exp. Biol., (1955) 33, p.54
20. 3. Antibacterial activity of dried Australian plants by a rapid direct plate test. Aust. J. exp. Biol., (1956) 34, p.17.
21. 4. Unpublished results of examination of 1,100 species.

PART TWO

AUSTRALIAN SALMONELLAS AND THEIR BACTERIOPHAGES.

INTRODUCTION

22. An Investigation of the Normal Agglutinins for Typhoid and Paratyphoid Bacilli in Human Sera in Victoria, and the Interpretation of the Widal Test. J. Hyg., (1938) 38, 566.
23. Agglutinins for Typhoid and Paratyphoid Bacilli in serum in South Australia. Med. J. Aust. (1941) p.642.
24. A New Salmonella Type: Salmonella Adelaide. Aust. J. exp. Biol., (1943) p.171.
25. Preliminary Report on Strains of Salmonella Blegdam Causing Infections in Humans in New Guinea. Med. J. Aust. (1946) p.326.
26. An Epidemic of Diarrhoea Caused by a New Strain of Salmonella Group. Med. J. Aust. (1945) p.368.
27. The Occurrence of Salmonella Types in Australia. 1. Aust. J. exp. Biol., (1944) 22, p.51.
28. The Occurrence of Salmonella Types in Australia. 2. Aust. J. exp. Biol., (1944) 22, p.201.
29. The Occurrence of Salmonella Types in Australia. 3. Aust. J. exp. Biol., (1947) 25, p.25.
30. The Occurrence of Salmonella Types in Australia. 4. Aust. J. exp. Biol., (1949) 27, p.375.

31. The Occurrence of Salmonella Types in Australia. 5. Salmonella Blegdam. Aust. J. exp. Biol., (1949) 27, p.597.
32. The Occurrence of Salmonella Types in Australia. 6. Aust. J. exp. Biol., (1950) 23, p.357.
33. The Occurrence of Salmonella Types in Australia. 7. Two new Salmonella types, S. morotai and S. ball. Aust. J. exp. Biol., (1950) 28, p.377
34. The Occurrence of Salmonella Types in Australia. 8. Aust. J. exp. Biol., (1952) 30, p.73.
35. Salmonella Types Occurring in Australia. 9. S. adelaide. Aust. J. exp. Biol., (1952) 30, p.177.
36. The Occurrence of Salmonella Types in Australia. 10. Aust. J. exp., Biol., (1953) 31, p.465.
37. The Occurrence of Salmonella Types in Australia. 11. Types found among 3,340 strains. Aust. J. exp. Biol., (1956) 34, p.369.

Lysogenicity and Lysis Patterns in the Salmonellas:

38. 1. S. adelaide, S. waycross and S. bovis-morbificans. Aust. J. exp. Biol., (1952) 30, p.333.
39. 2. Further tests with S. adelaide. Aust. J. exp. Biol., (1954) 32, p.221.
40. 3. A bacteriophage grouping scheme for S. adelaide. Aust. J. exp. Biol., (1955) 33, p.371.
41. 4. Application of a bacteriophage grouping scheme to 413 strains of S. adelaide. Aust. J. exp. Biol., (1955) 33, p.375.
42. 5. Further tests with S. bovis-morbificans. Aust. J. exp. Biol., (1955) 33, p.221.
43. 6. The occurrence of S. bovis-morbificans of Phage Group 6. Aust. J. exp. Biol., (1955) 34, p.225.
44. 7. A Bacteriophage grouping scheme for S. bovis-morbificans. Aust. J. exp. Biol., (1956) 34, p.231.
45. 8. Bacteriophage grouping of 167 strains of S. bovis-morbificans. Aust. J. exp. Biol., (1956) 34, p.349.
46. 9. The Indicator Strains of the Bacteriophage Groups of S. bovis-morbificans. Aust. J. exp. Biol. (1956) 34, p.361.
47. 10. S. potsdam. Aust. J. exp. Biol., (1956) 34, in press.

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48. 11. The bacteriophage grouping scheme compared with other schemes using bacteriophage for exact strain identification in the Salmonellas.

Salmonella Bacteriophages:

49. 1. Bacteriophages of S. adelaide. Aust. J. exp. Biol., (1953) 31, p.441.
50. 2. Bacteriophages of S. waycross. Aust. J. exp. Biol., (1953) 31, p.591.
51. 3. Two new bacteriophages of S. adelaide. Aust. J. exp. Biol., (1956) 34, p.27.
52. 4. Some bacteriophages of S. bovis-morovicans. Aust. J. exp. Biol., (1956) 34, in press.
53. 5. Some bacteriophages of S. potsdam. Aust. J. exp. Biol., (1956) 34, in press.