

VI.

G R A P H S.

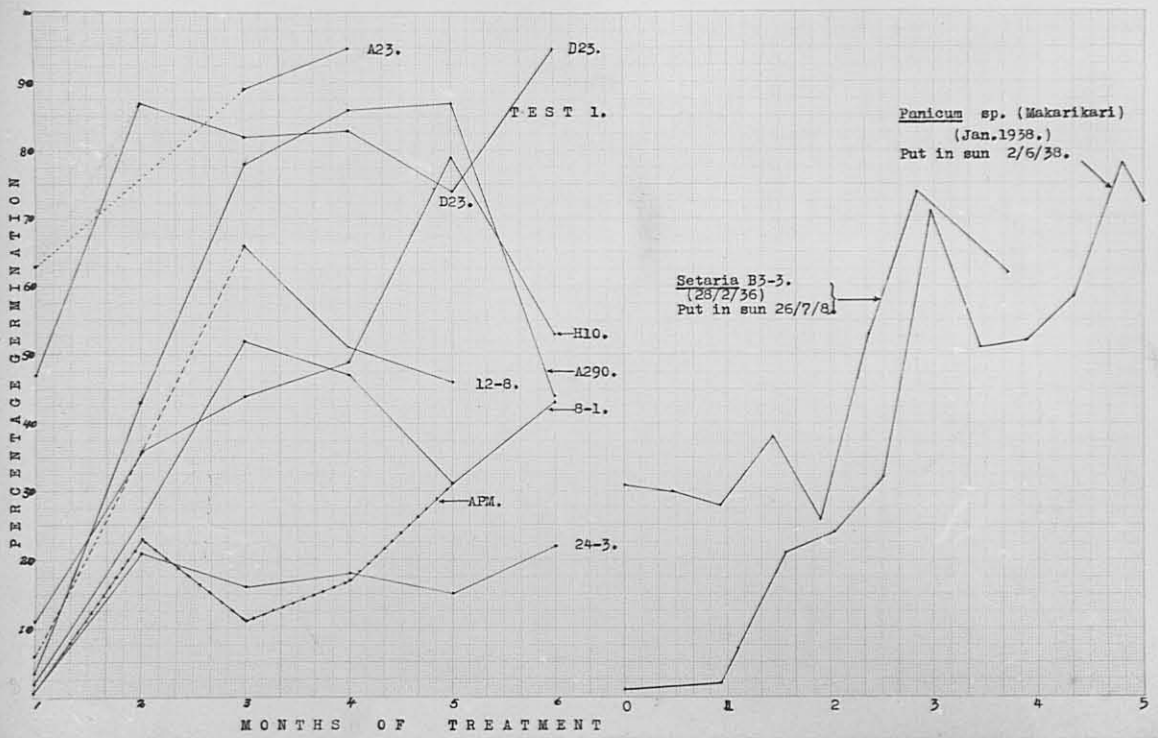


Fig. 1A. (Test no.1). Curves showing the effect of outdoor exposure (in sun and rain) on the course of delayed germination of Digitaria lines 12-8, 8-1, and 24-3; of ecotypes A23 and D23; of Panicum maximum APM; of Paspalum scrobiculatum A290; of Setaria sphacelata H10. Seed was spread out on wire gauze trays, placed on the bare ground.

1B. Curves showing the effect of sunlight on the delayed germination of Setaria B3-3 and Panicum sp. (Makarikari). The controls did not exceed 40% and 10% resp.

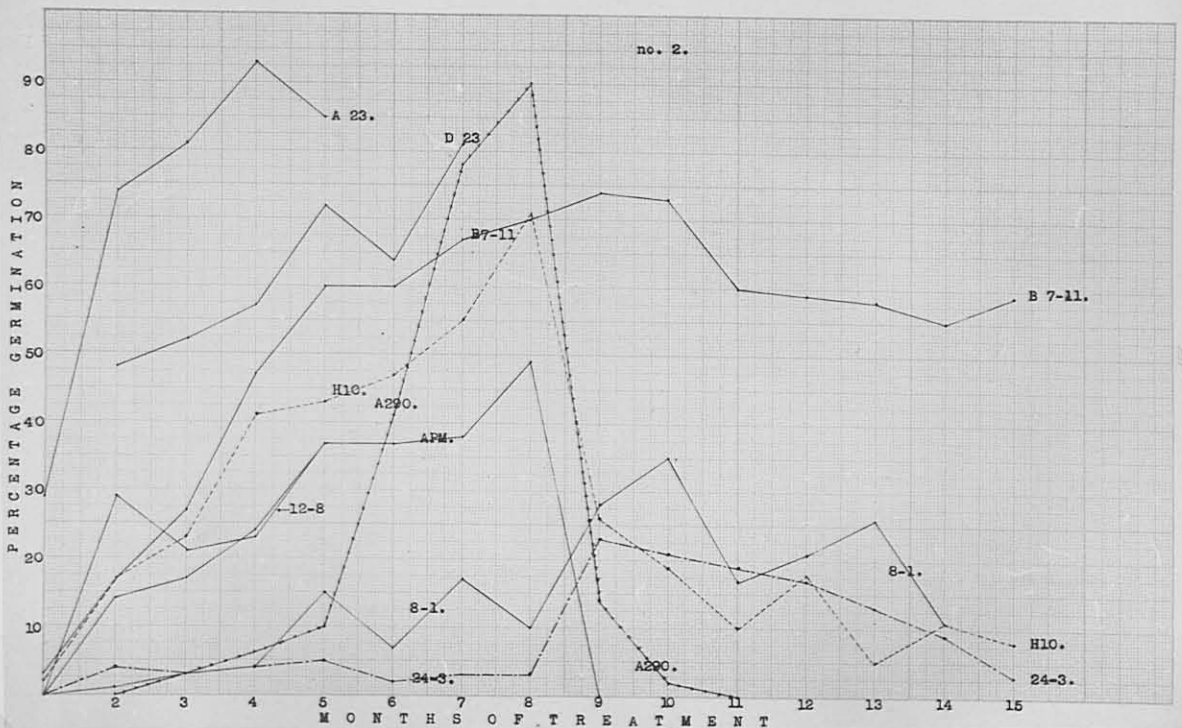


Fig. 2. (Test no.2). Curves showing the effect of exposure of Digitaria lines 12-8, 8-1 and 24-3, ecotypes A23 and D23, of P. maximum APM, of P. minus B7-11, of Setaria sphacelata H10 and of P. scrobiculatum A290, in muslin bags, placed in a glass dish with loose-fitting glass cover, outdoors, on the course of delayed germination.

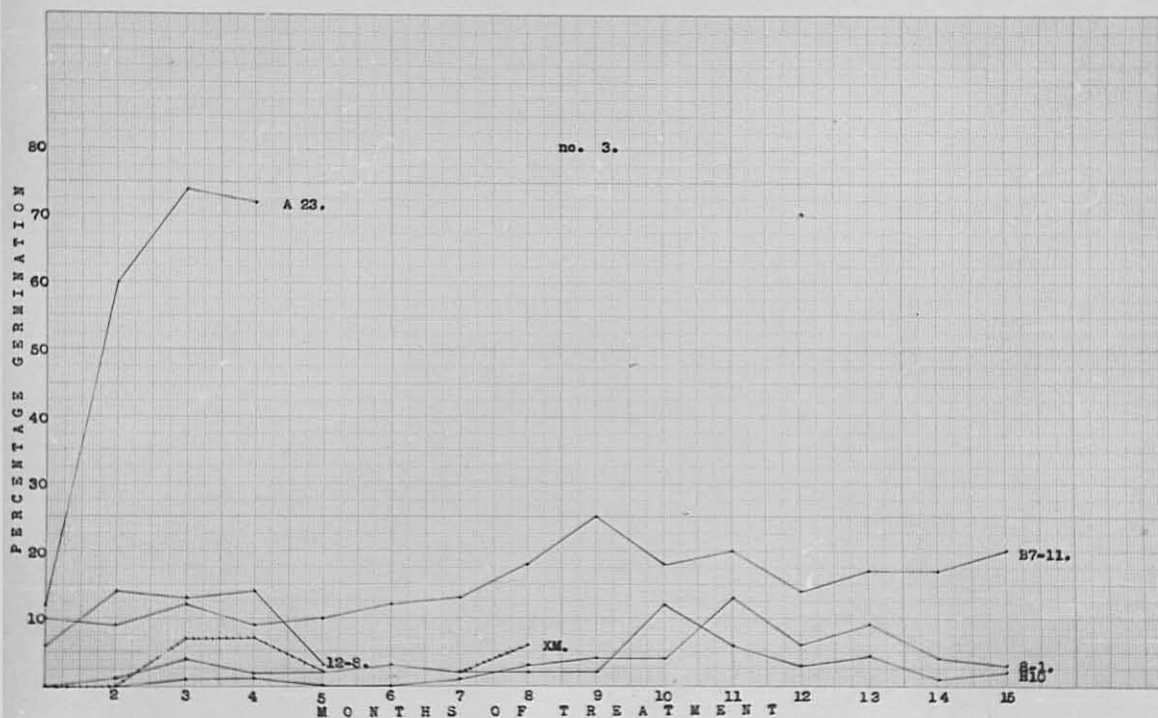


Fig. 3. (Test no.3). The course of delayed germination of seed of Digitaria 12-8, 8-1, A23 and "Molopo", of P. minus B7-11 and of S.sphacelata H10, when kept in muslin bags placed in a sealed container with 0 humidity, exposed outdoors.

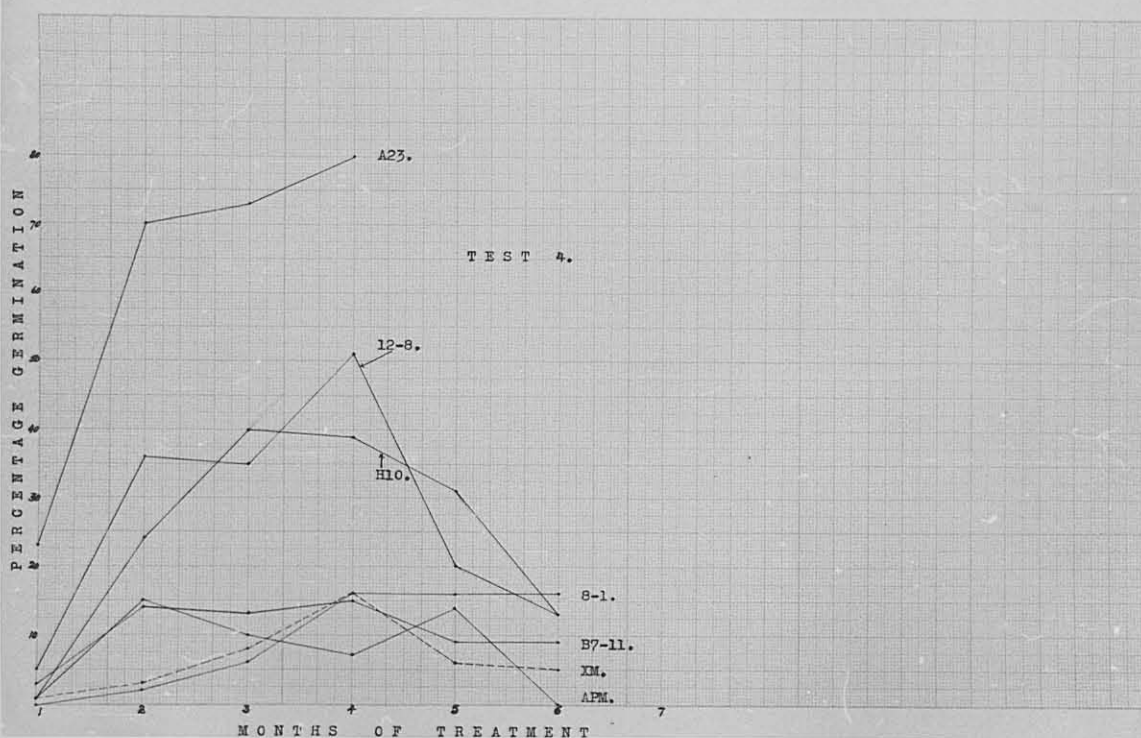


Fig. 4. (Test no.4). The course of delayed germination of seed of Digitaria 12-8, 8-1, A23 and "Molopo", of Panicum minus B7-11, of Panicum maximum APM and of Setaria sphacelata H10, when kept in muslin bags placed in a sealed glass container with 50% humidity, exposed outdoors.

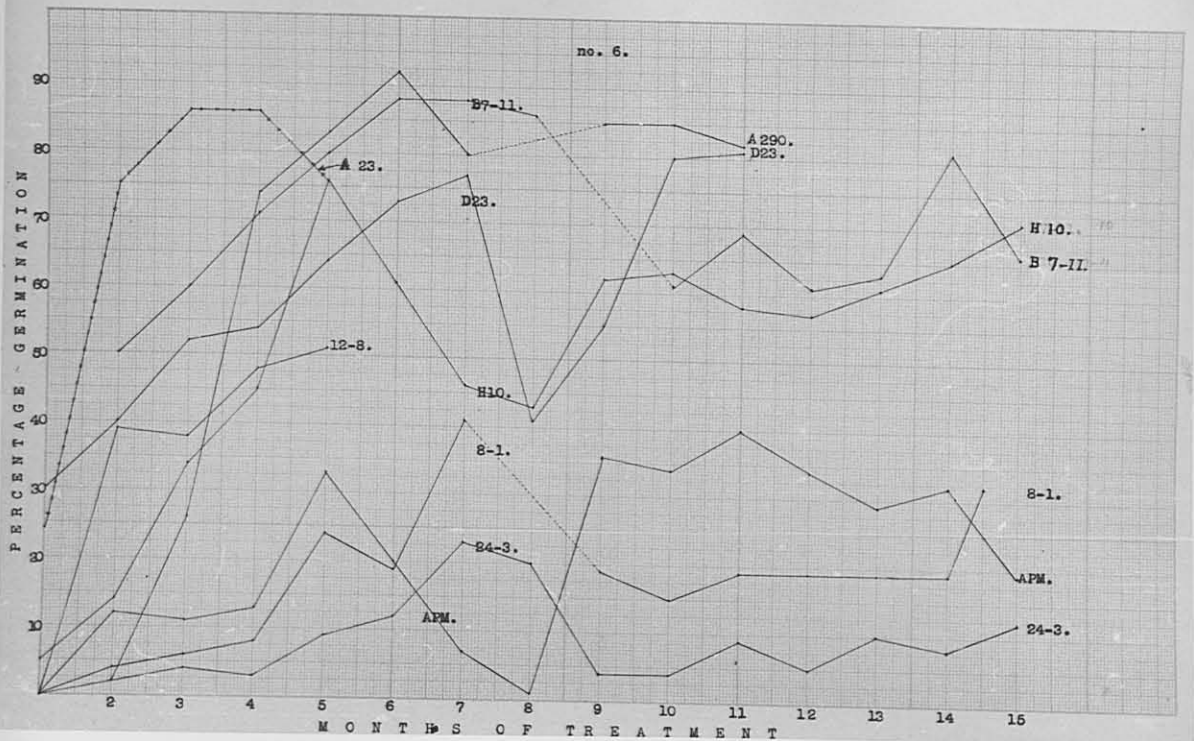


Fig. 5. (Test no. 6). The course of delayed germination of seed of *Digitaria* 24-3, 12-8 and 8-1, of *Digitaria* ecotypes A23 and D23, of *Panicum maximum* APM, of *Panicum minus* B7-11, of *Paspalum scrobiculatum* A290 and of *Setaria sphacelata* H10, when kept in muslin bags, placed in a jute bag (not exposed to rain), outdoors.

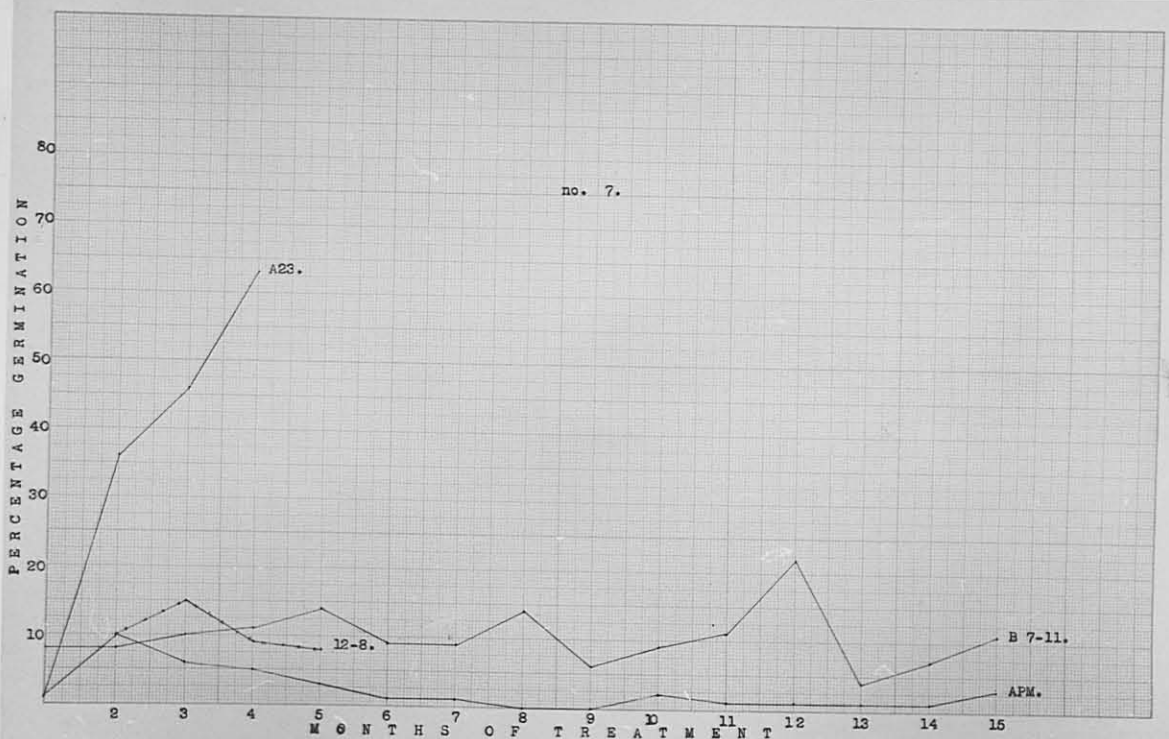


Fig. 6. (Test no. 7). The course of delayed germination of seed of *Digitaria* 12-8, and A23, of *Panicum minus* B7-11, of *P. maximum* APM, when kept in shade in a sealed glass container with 0 humidity, outdoors.

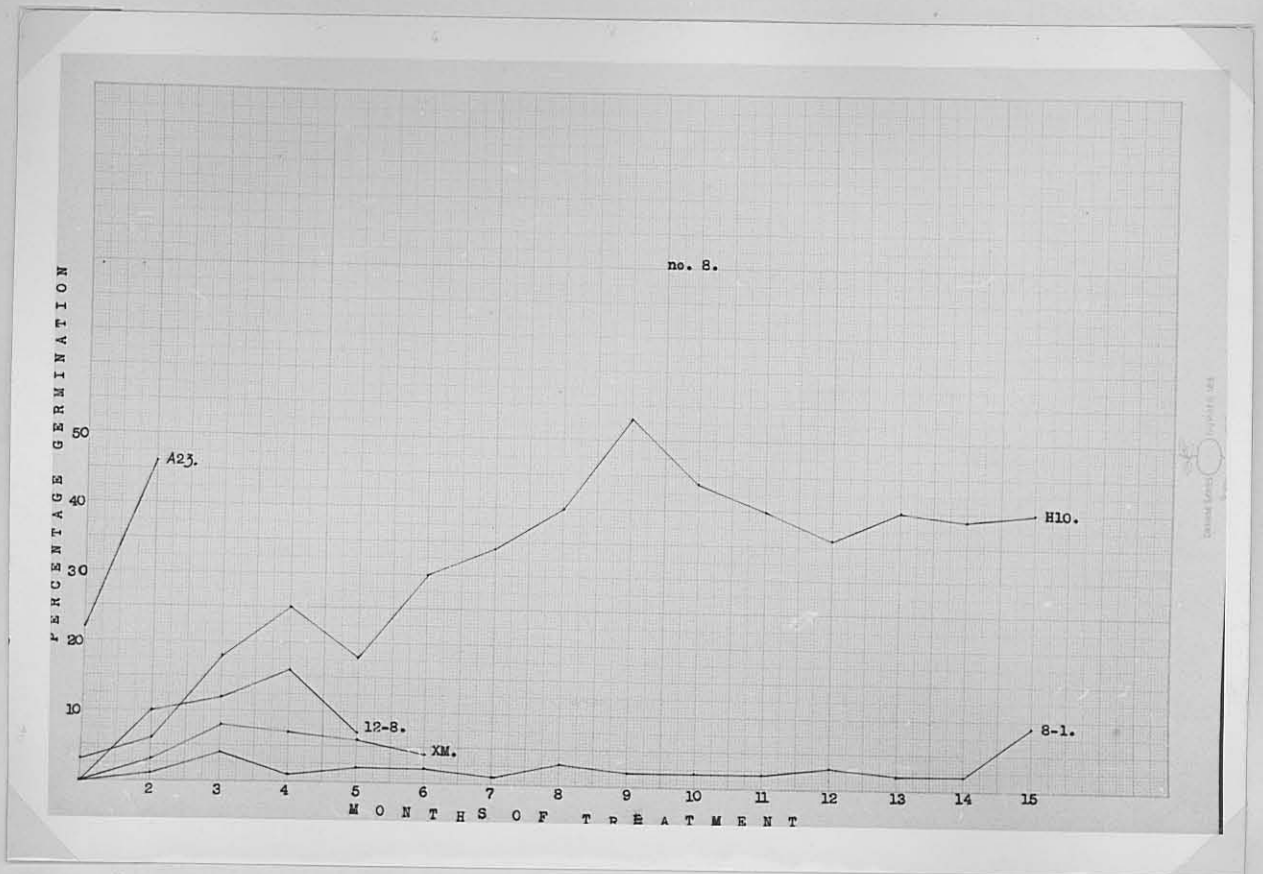


Fig. 7. (Test no.8). The course of delayed germination of seed of Digitaria 12-8, 8-1, A23 and "Molopo;" and of Setaria sphacelata H10, when kept in a sealed glass container with 50% humidity, in shade outdoors.

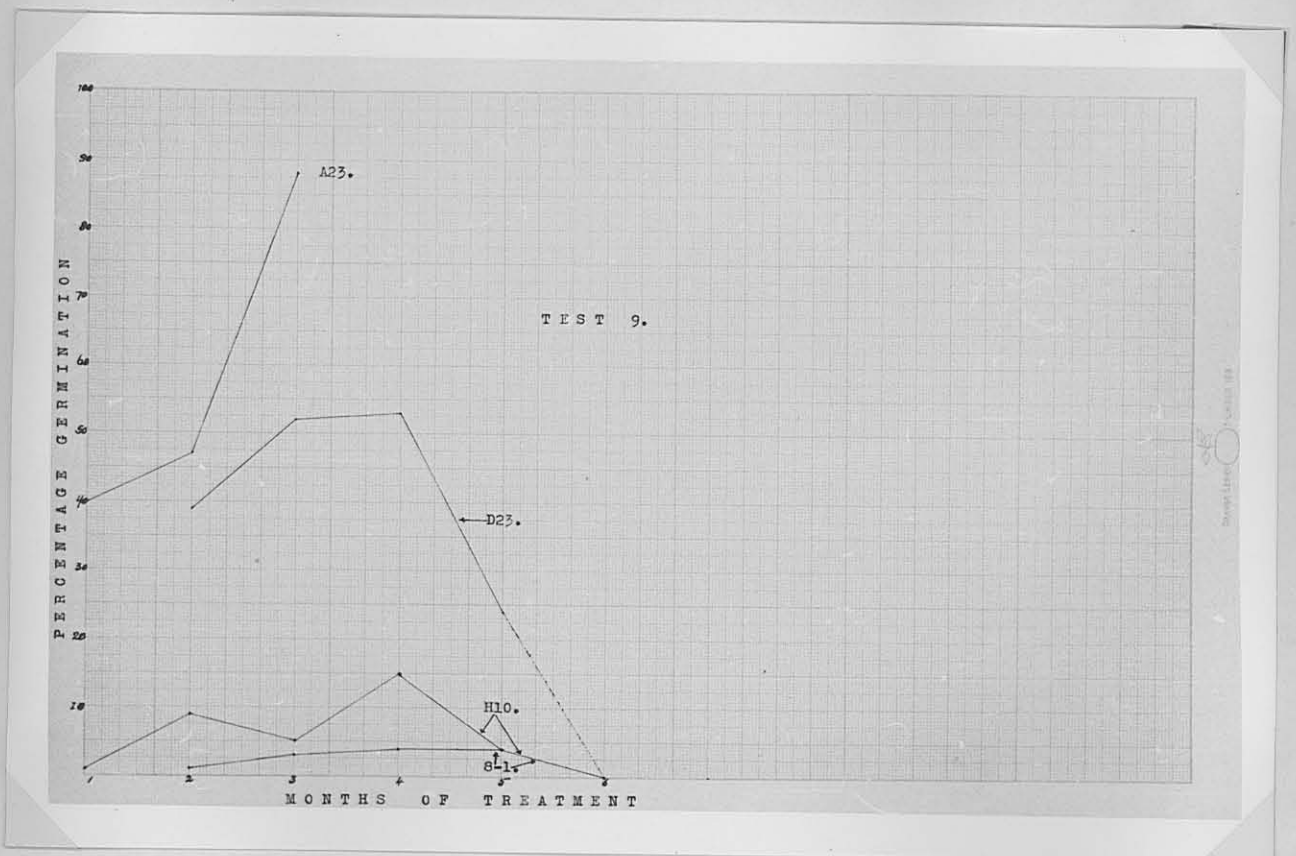


Fig. 8. (Test no.9). The course of delayed germination of seed of Digitaria 8-1, A23, and D23, and of Setaria sphacelata H10, when kept in a sealed glass container with 90% humidity, in shade, outdoors.

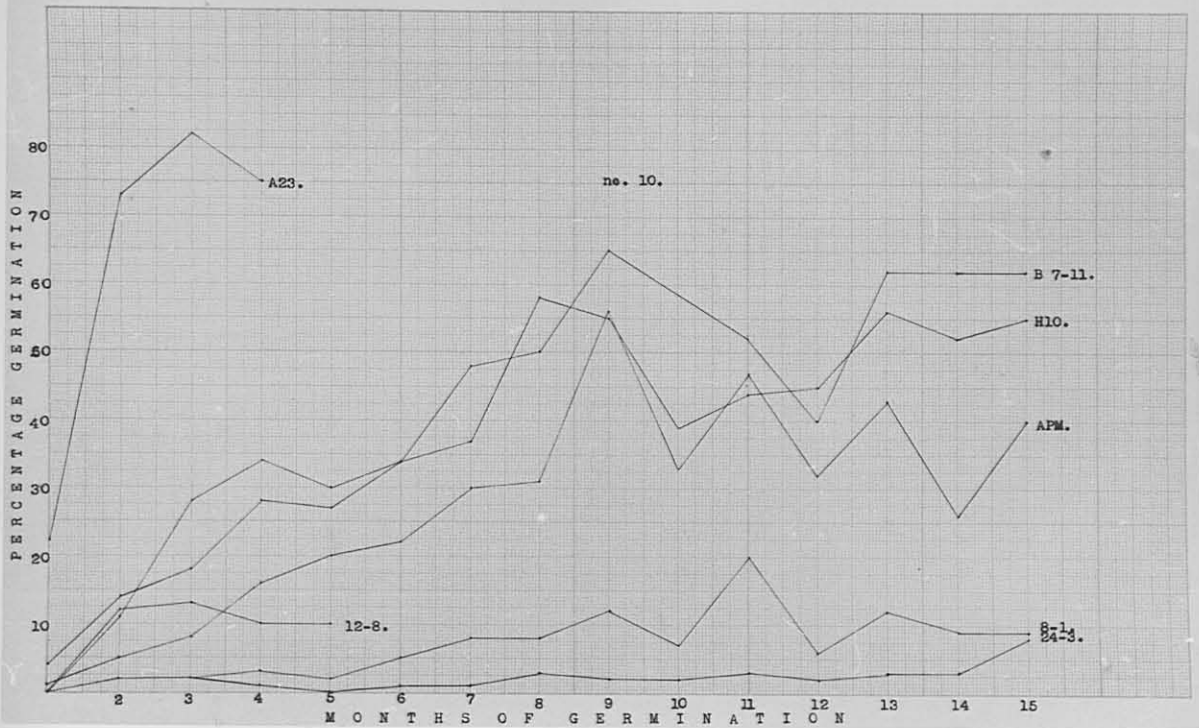


Fig. 9. (Test no.10). Showing the course of delayed germination of Digitaria, lines 12-8, 8-1 and 24-3 and ecotype A.23; of Setaria sphacelata H.10; of Panicum maximum APM and of Panicum minus B.7-11, when the seeds were kept in muslin bags, placed in a glass dish with glass cover (permitting air circulation), in shade, outdoors.

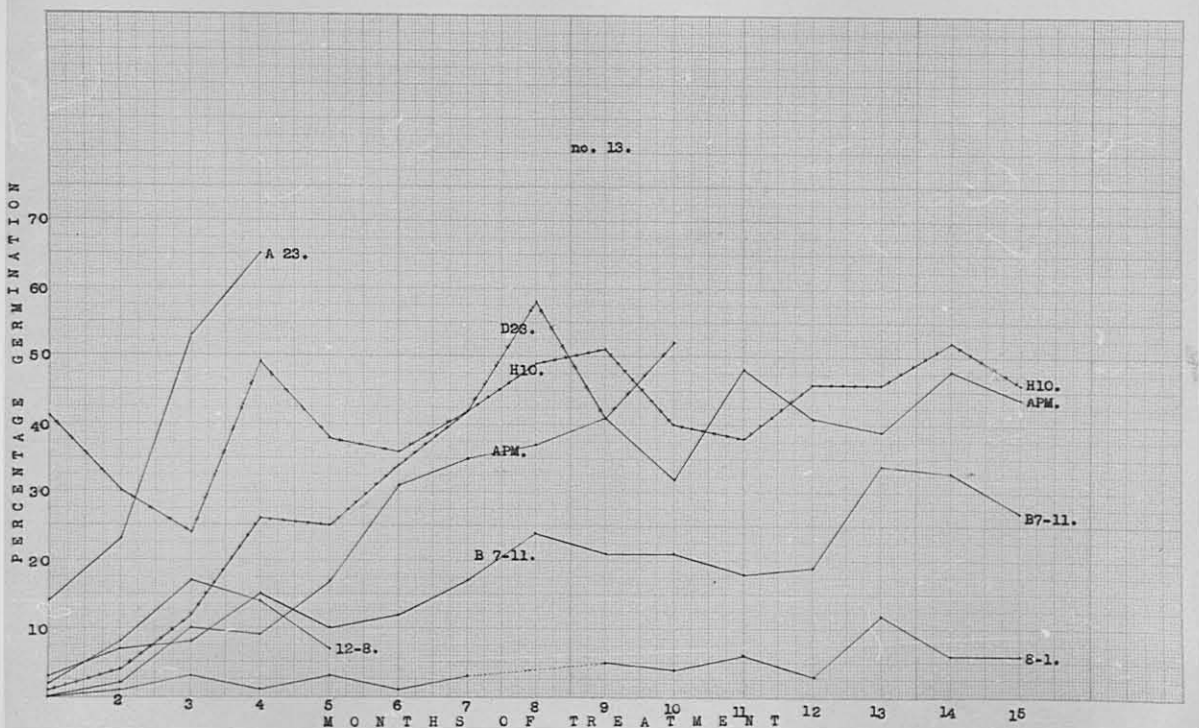


Fig. 10. (Test no.13). Showing the effect of sealed outdoor storage, in a tin, on the course of delayed germination of seeds of Digitaria lines 12-8 and 8-1 and of ecotypes A.23 and D.23; of Panicum maximum APM; of P. minus B.7-11 and of Setaria sphacelata H.10.

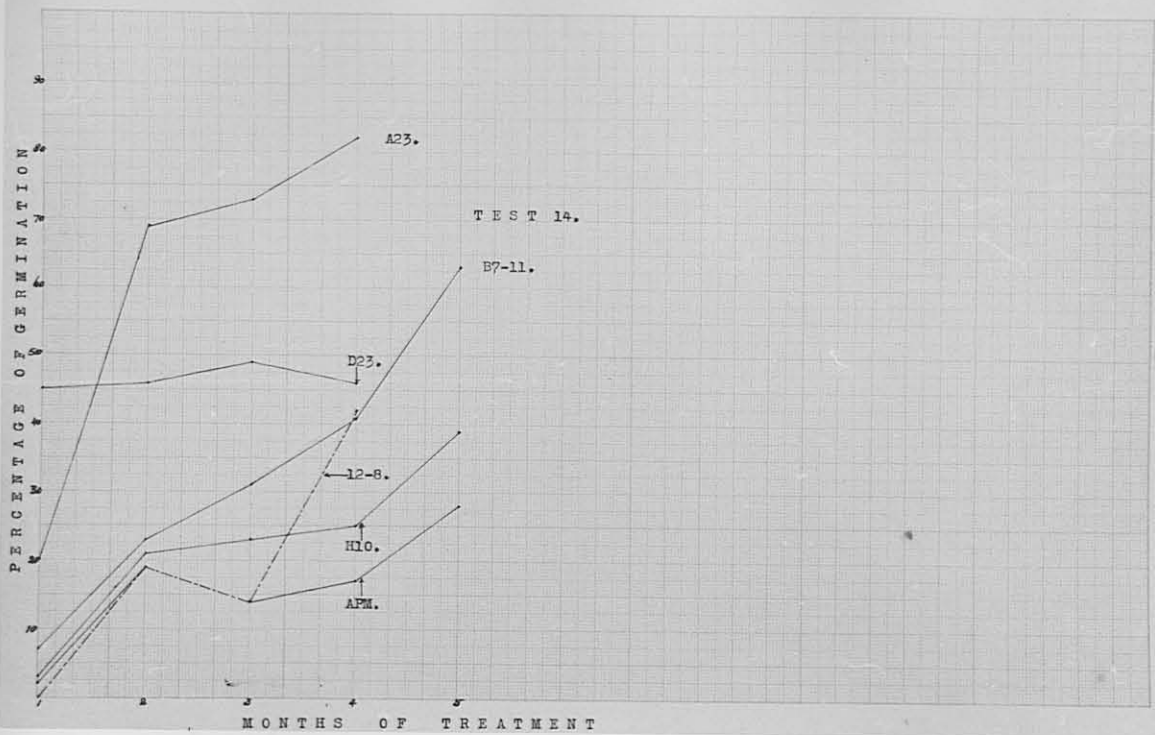


Fig. 11. (Test no.14). Showing the effect of outdoor storage in tin, permitting air circulation, on the course of delayed germination of seed of Digitaria ecotypes A23 and D23 and of line 12-8; of Panicum maximum APM; of P. minus B7-11, and of Setaria sphacelata H10.

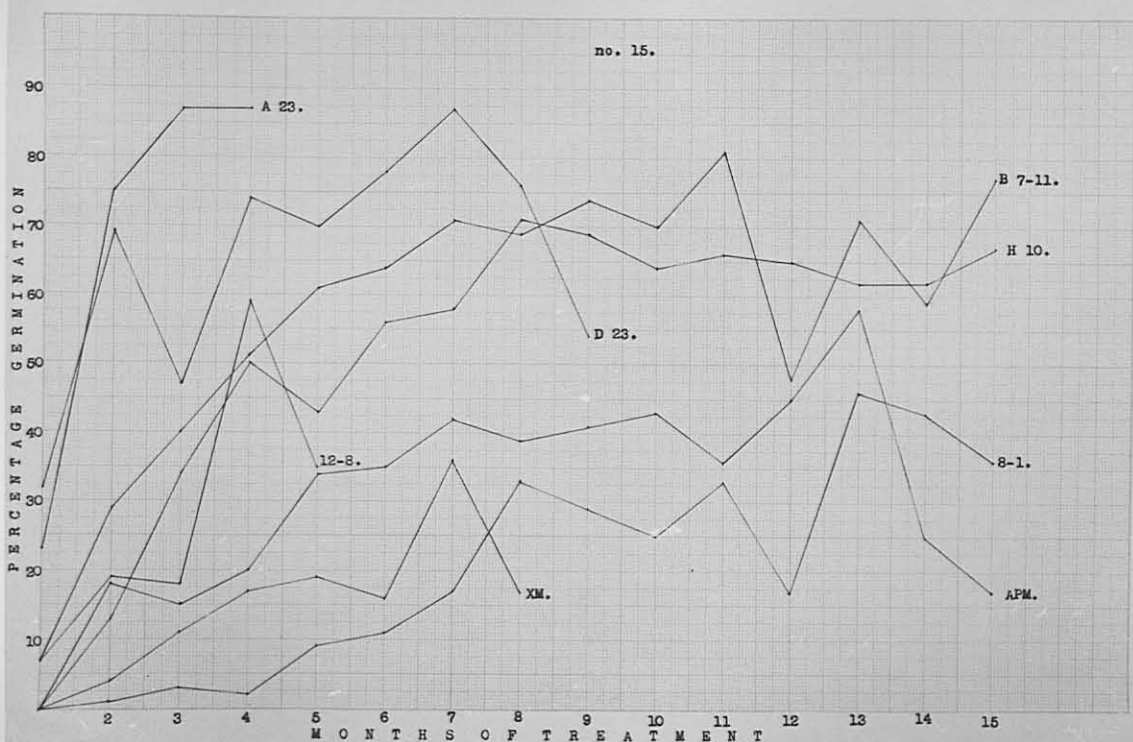


Fig. 12. (Test no.15). Showing the effect of placing seed in muslin bags kept in a brown paper bag outside, on the progress of delayed germination of Digitaria ecotypes A23, D23 and "Molopo" and of lines 12-8 and 8-1; of Panicum maximum APM; of P. minus B7-11 and of Setaria sphacelata H10.

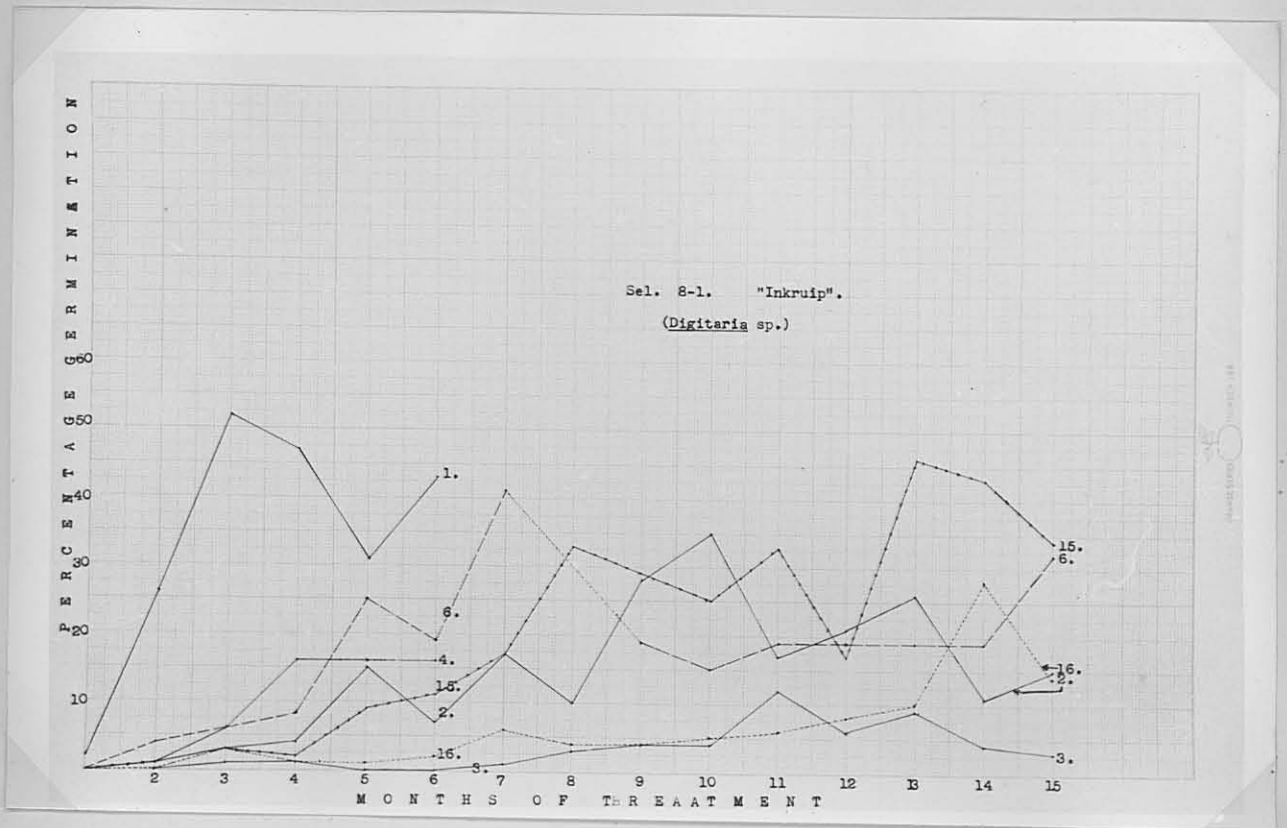


Fig. 13. Showing the effect of 7 outdoor treatments on the course of delayed germination of seed of *Digitaria* line 8-1. The numbers of the graphs refer to the even-numbered treatments described in the text.

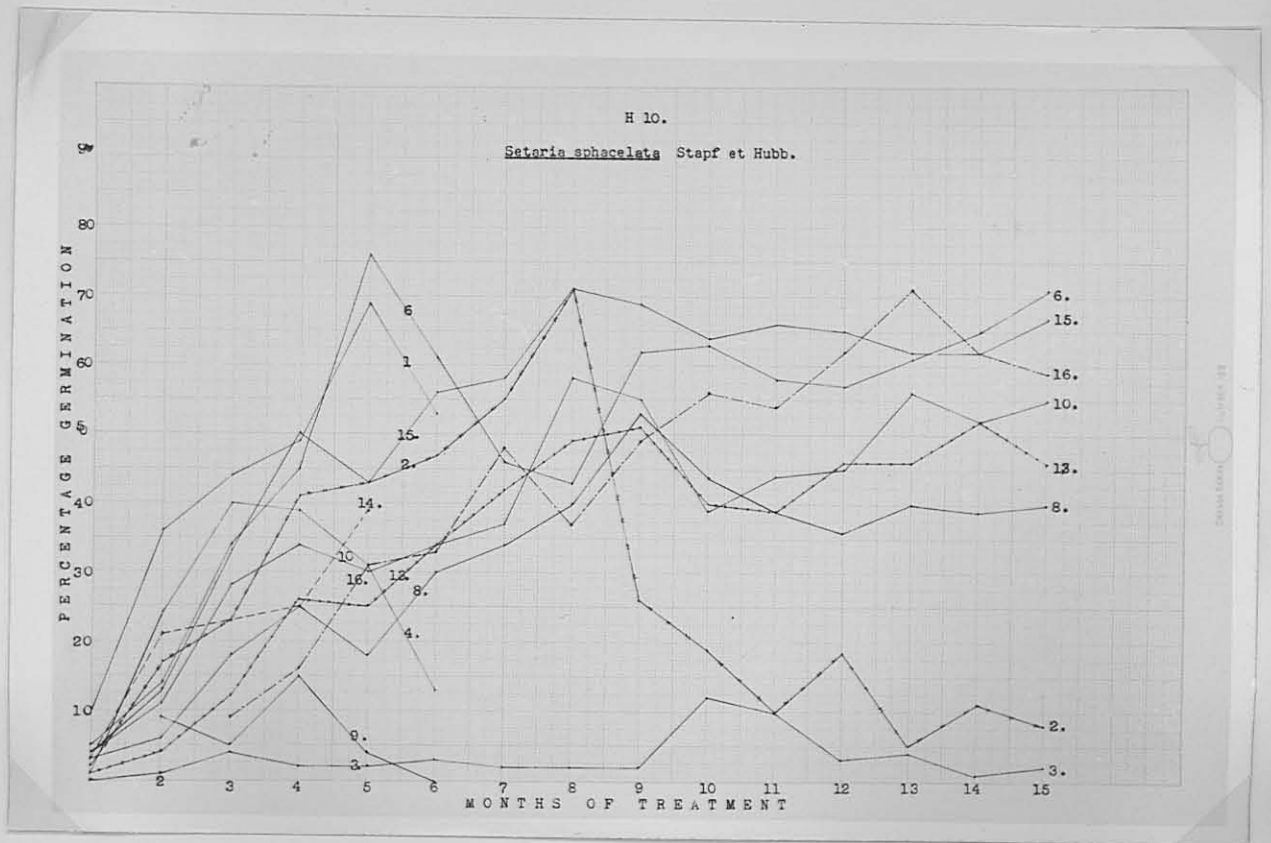


Fig. 14. Showing the effect of 12 outdoor treatments on the course of delayed germination of seed of *Setaria sphacelata* H10. The numbers of the graphs refer to the even-numbered treatments described in the text.

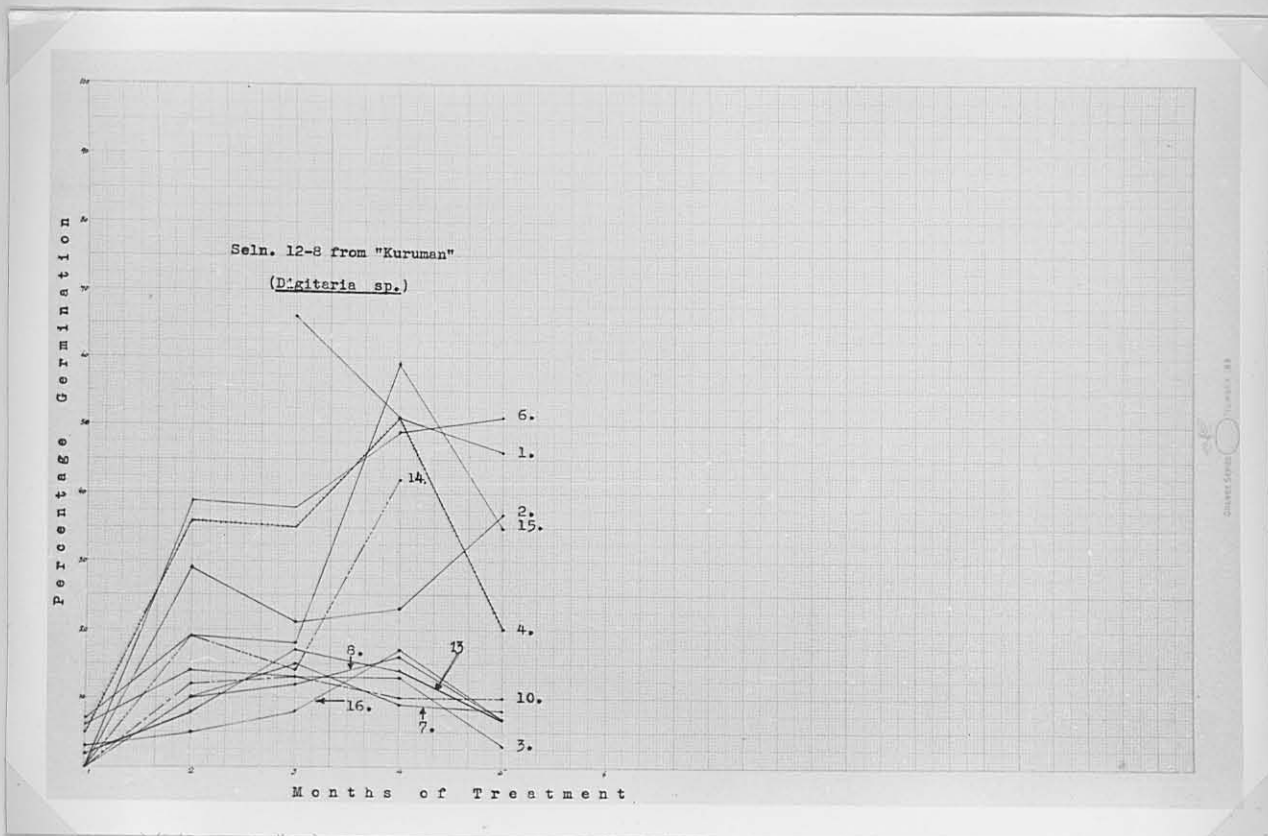


Fig.15. Showing the effect of 12 out-door treatments on the course of delayed germination of seeds of *Digitaria* line 12-8. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

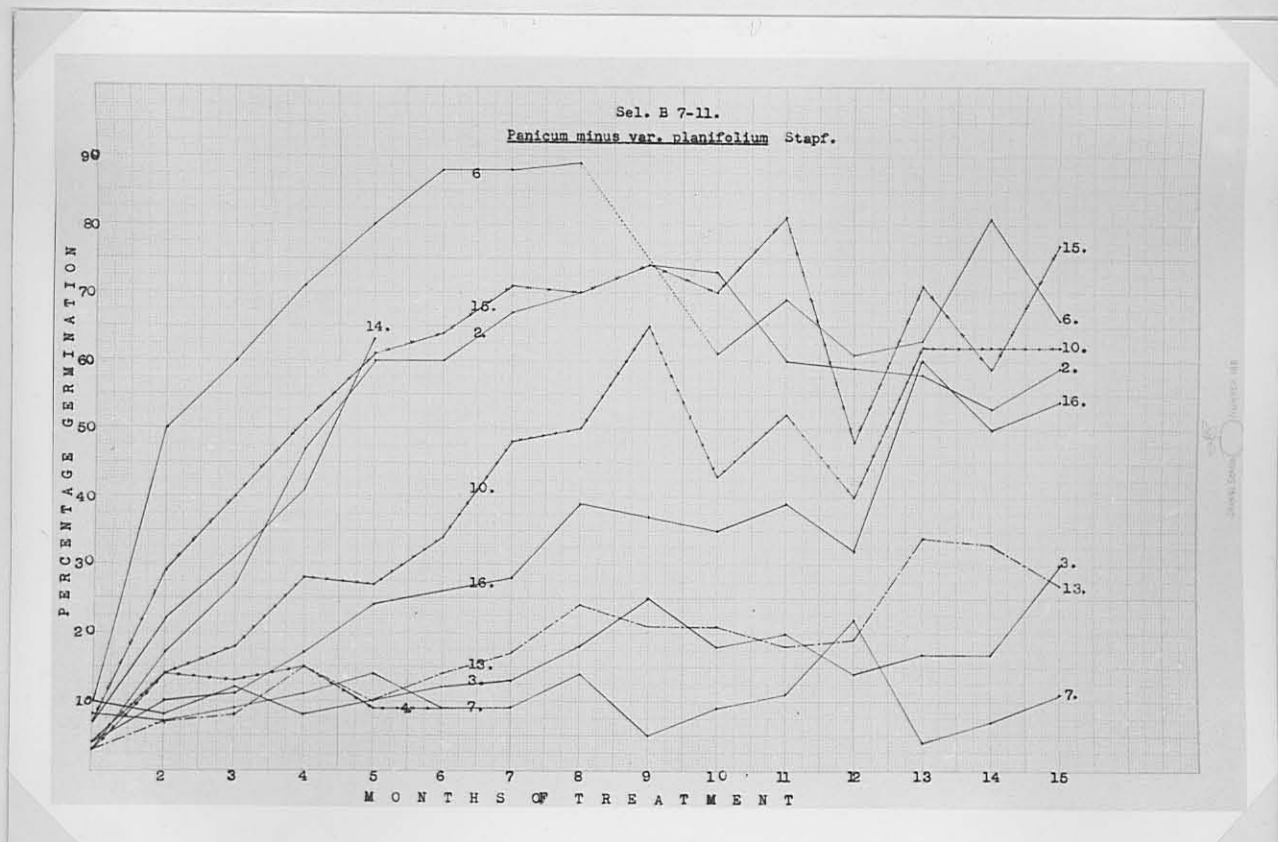


Fig.16. Showing the effect of 10 out-door treatments on the course of delayed germination of seeds of *Panicum minus* line B.7-11. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

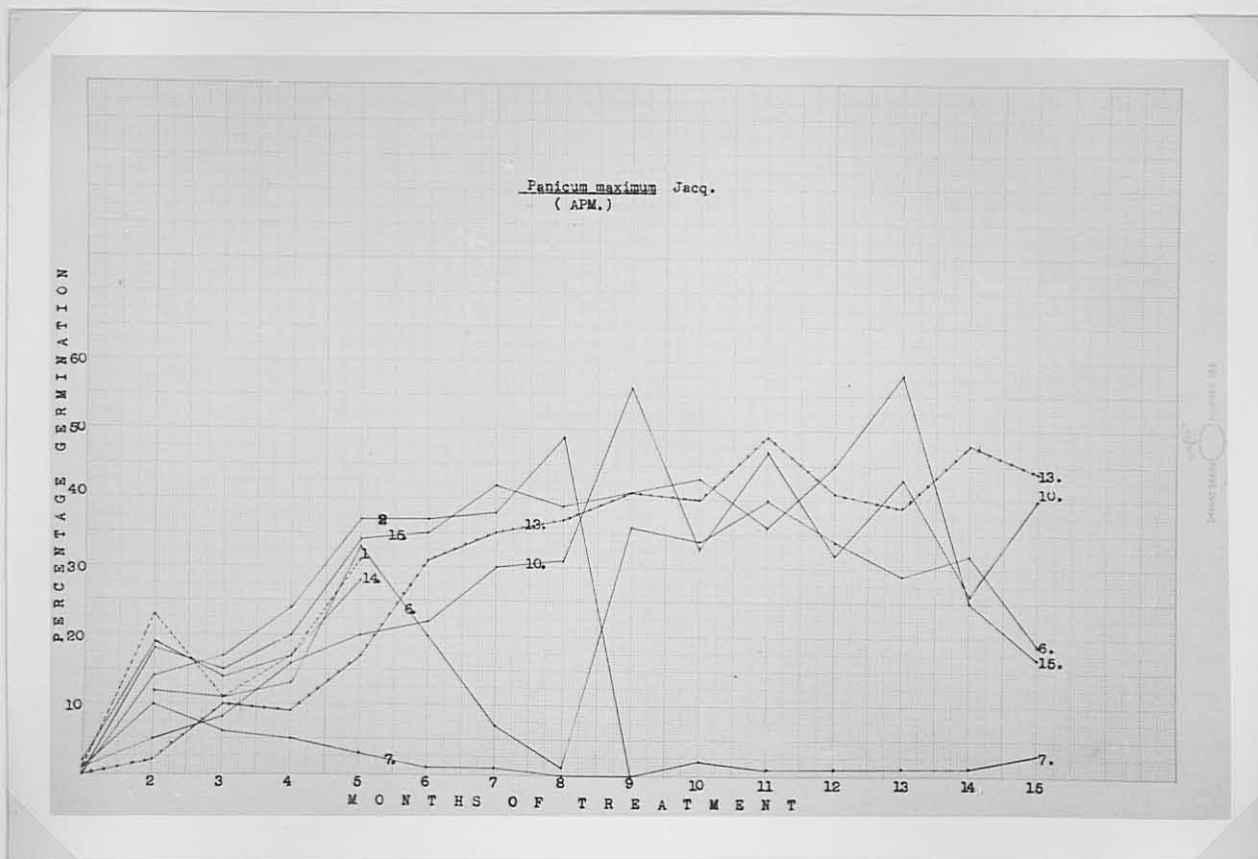


Fig. 17. Showing the effect of 8 out-door treatments on the course of delayed germination of seeds of Panicum maximum APM . (The numbers of the graphs refer to the even-numbered treatments described in the text).

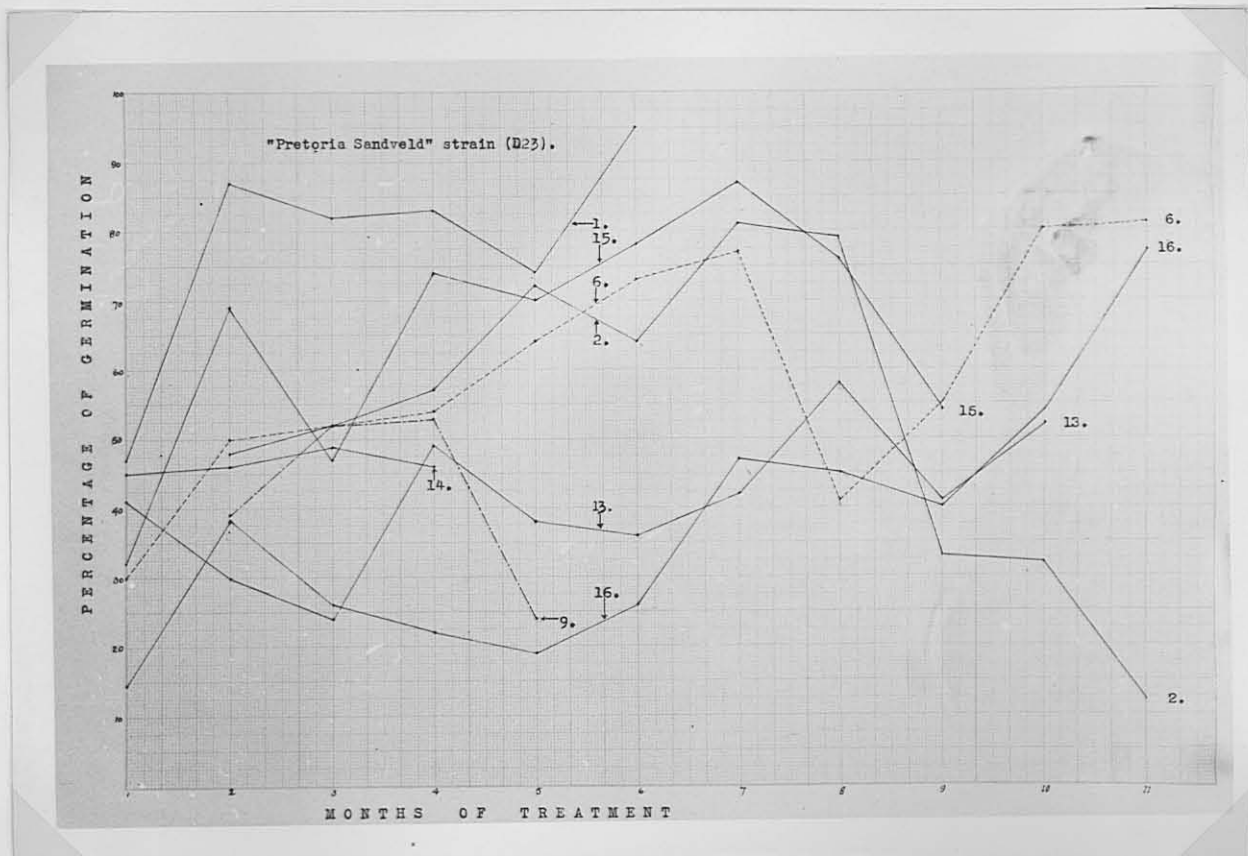


Fig.18. Showing the effect of 8 out-door treatments on the course of delayed germination of seeds of Digitaria ecotype D.23. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

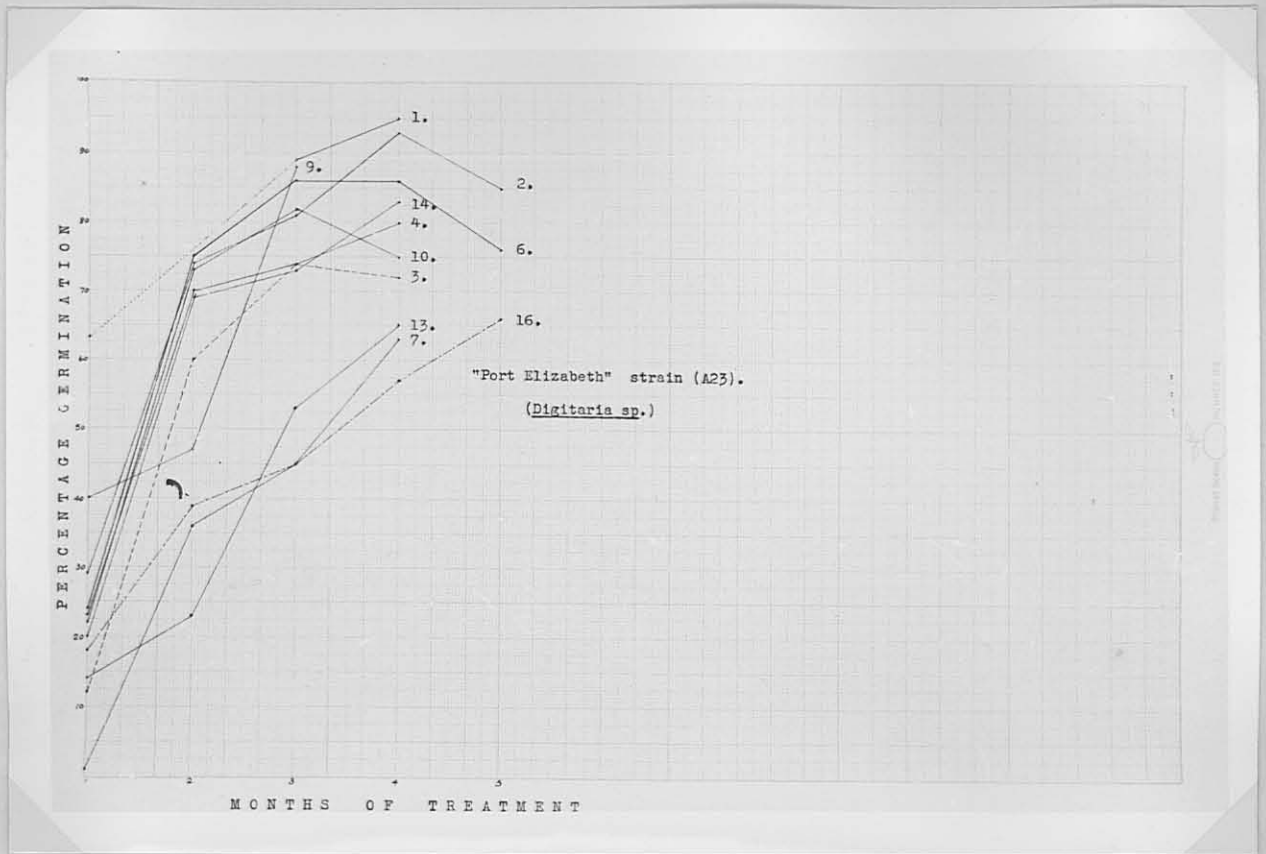


Fig. 19. The effect of 11 outdoor treatments on the course of delayed germination of seed of *Digitaria* A23. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

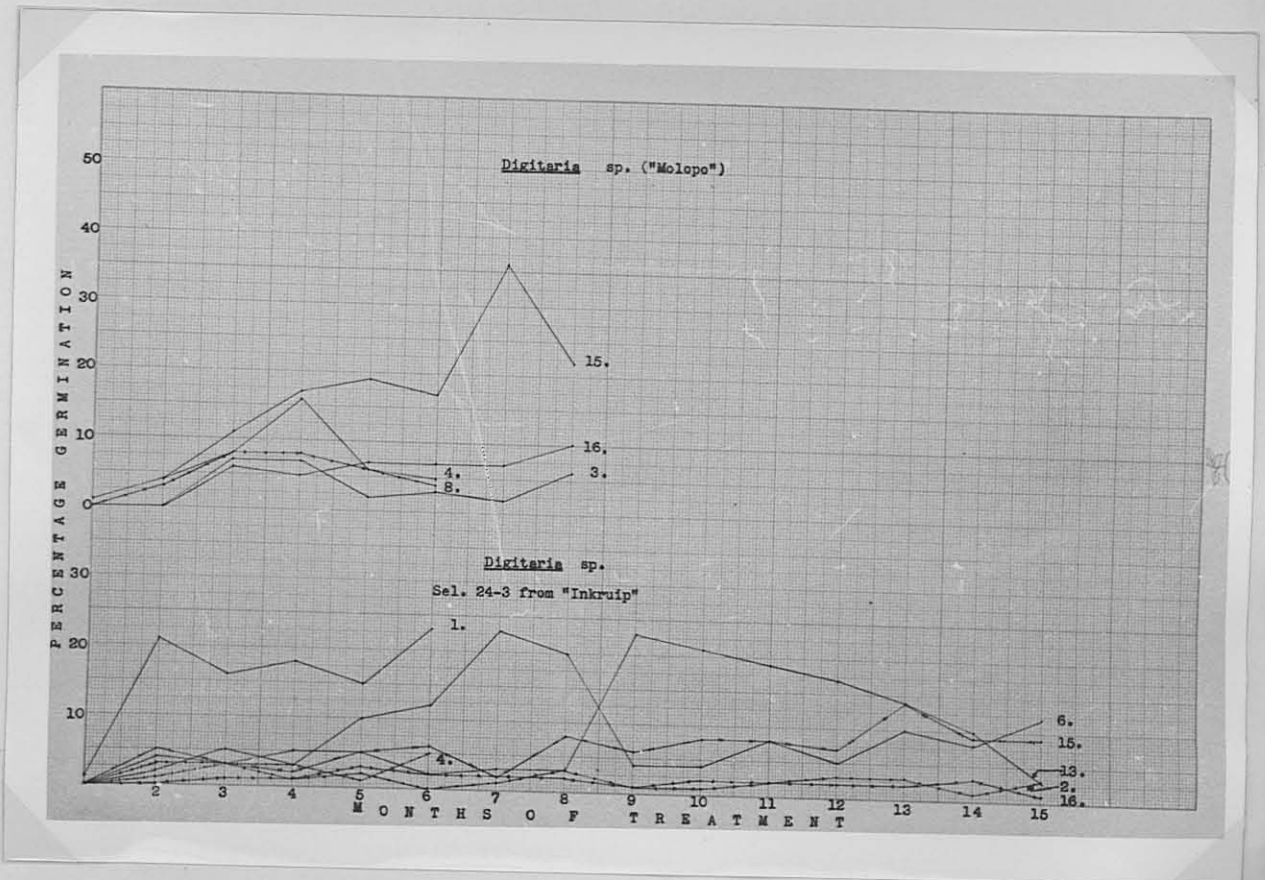


Fig. 20. The effect of several outdoor treatments on the course of delayed germination of *Digitaria* 24-3 and Molopo. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

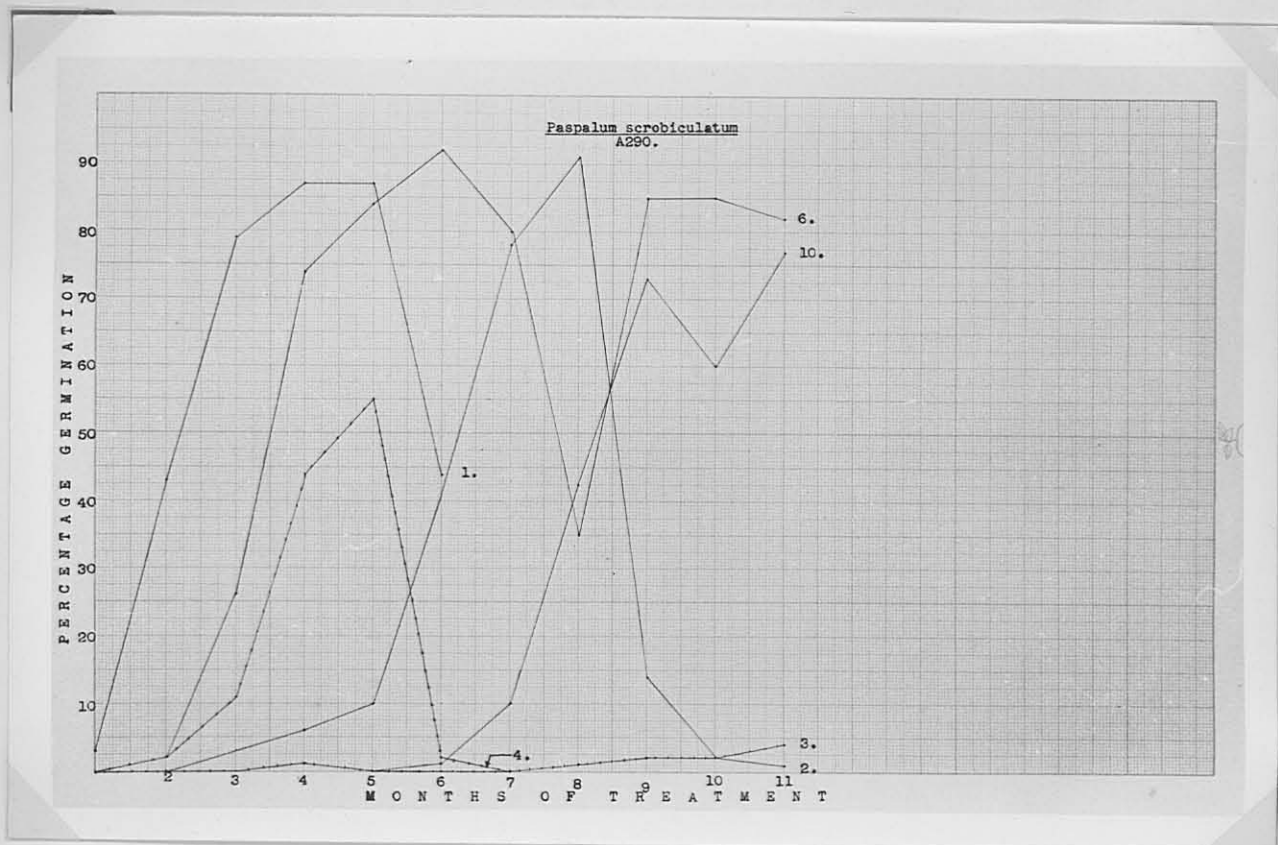


Fig. 21. Showing the effect of 6 out-door treatments on the course of delayed germination of seeds of *Paspalum scrobiculatum* A.290. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

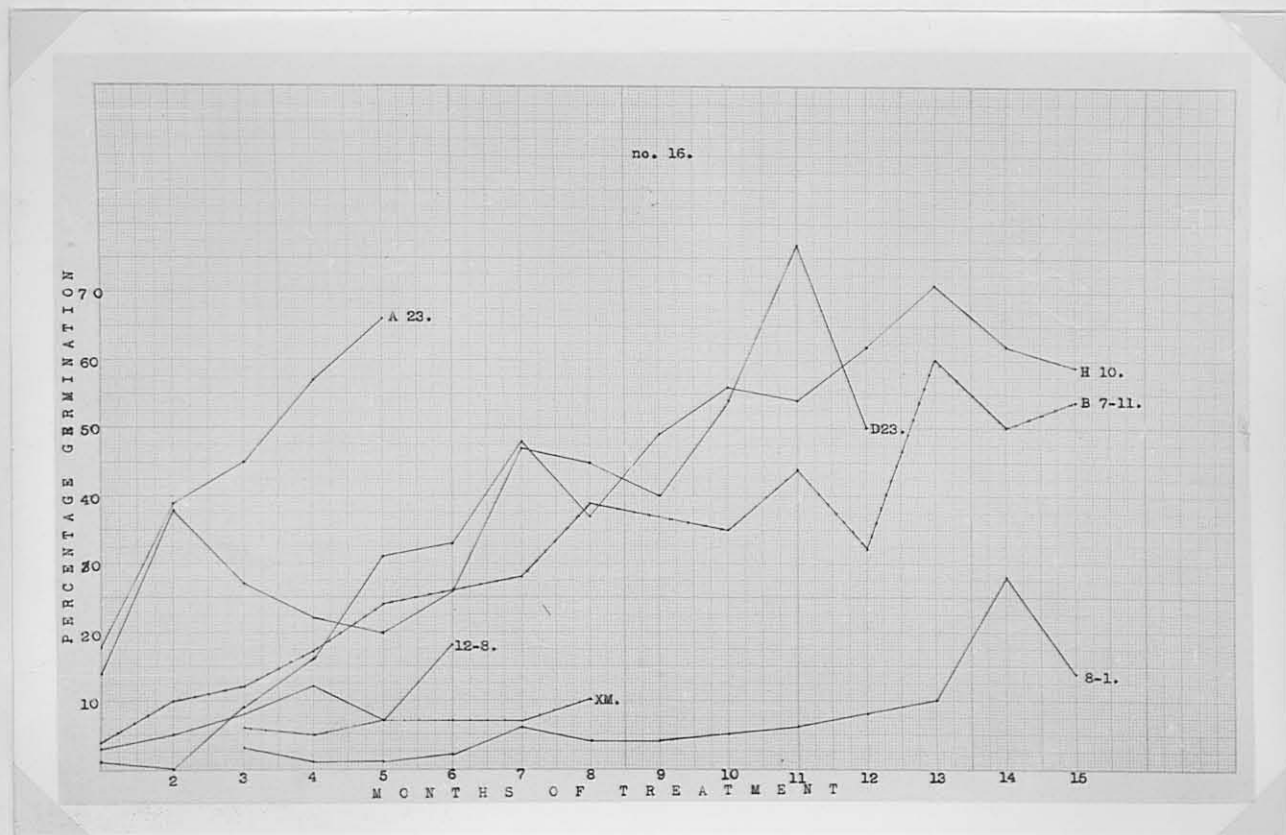


Fig.22. (Test no.16). Showing the effect of placing seeds in muslin bags kept in a brown paper bag, indoors, on the progress of delayed germination of seeds of *Digitaria* ecotypes A.23, D.23 and "Molopo" and lines 12-8 and 8-1; of *Panicum minus* B.7-11 and of *Setaria sphacelata* H.10.

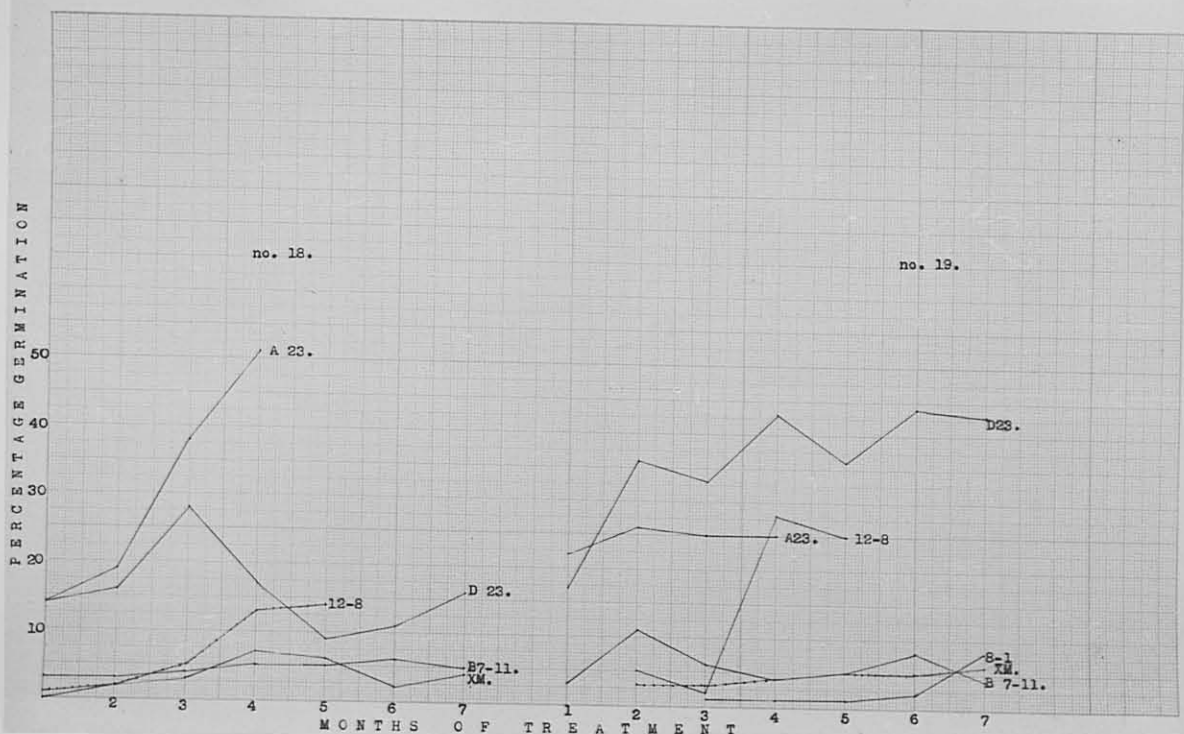


Fig. 23. (Test no. 18). Showing the effect of keeping seed in a sealed glass container at 50% humidity (in a domestic refrigerator) on the course of delayed germination of Digitaria A23, D23, 12-8 and "Molopo"; and of Panicum minus B7-11.

(Test no. 19). The course of delayed germination of seed of Digitaria A23, D23, 12-8, 8-1 and "Molopo", and of Panicum minus B7-11, when the seed kept in a sealed glass container at 90% humidity, in a domestic refrigerator.

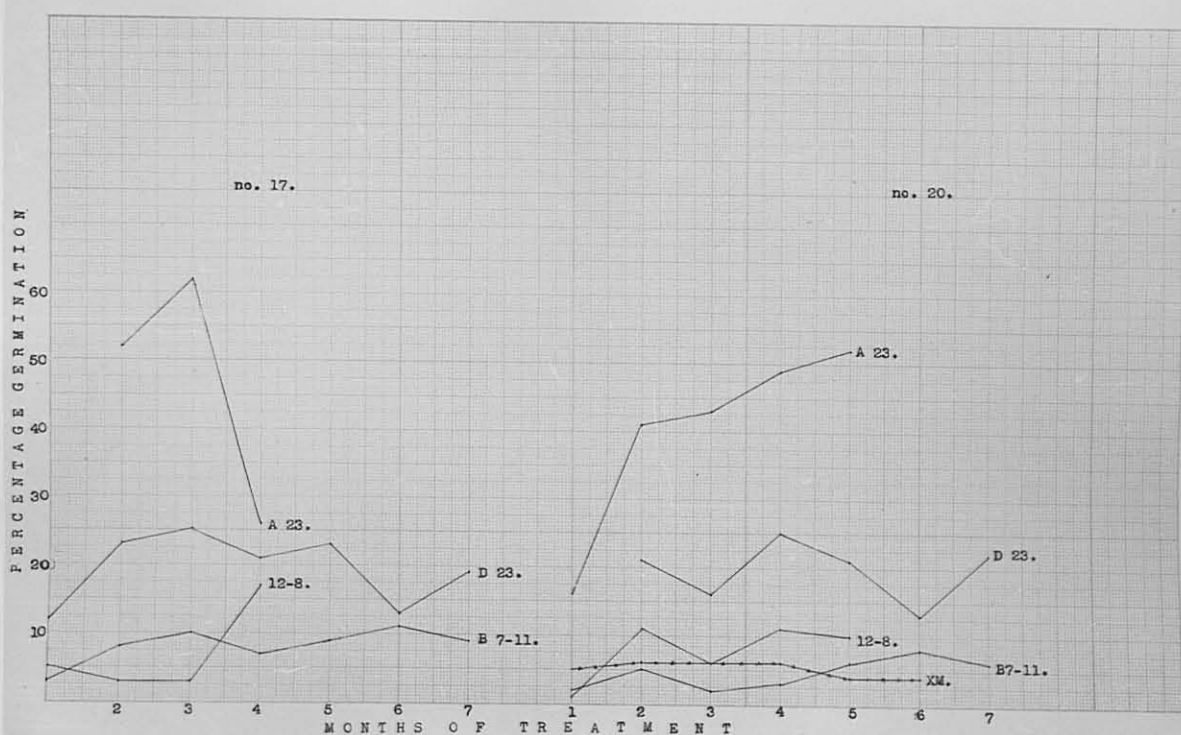


Fig. 24. (Test no. 17). The course of delayed germination of Digitaria A23, D23 and 12-8 and of Panicum minus B7-11, when the seed were kept in a sealed glass container at 0 humidity in a domestic refrigerator.

(Test no. 20). The course of delayed germination of Digitaria A23, D23, 12-8 and "Molopo" and of Panicum minus B7-11, when seed were kept as in the previous but uncontrolled humidity.

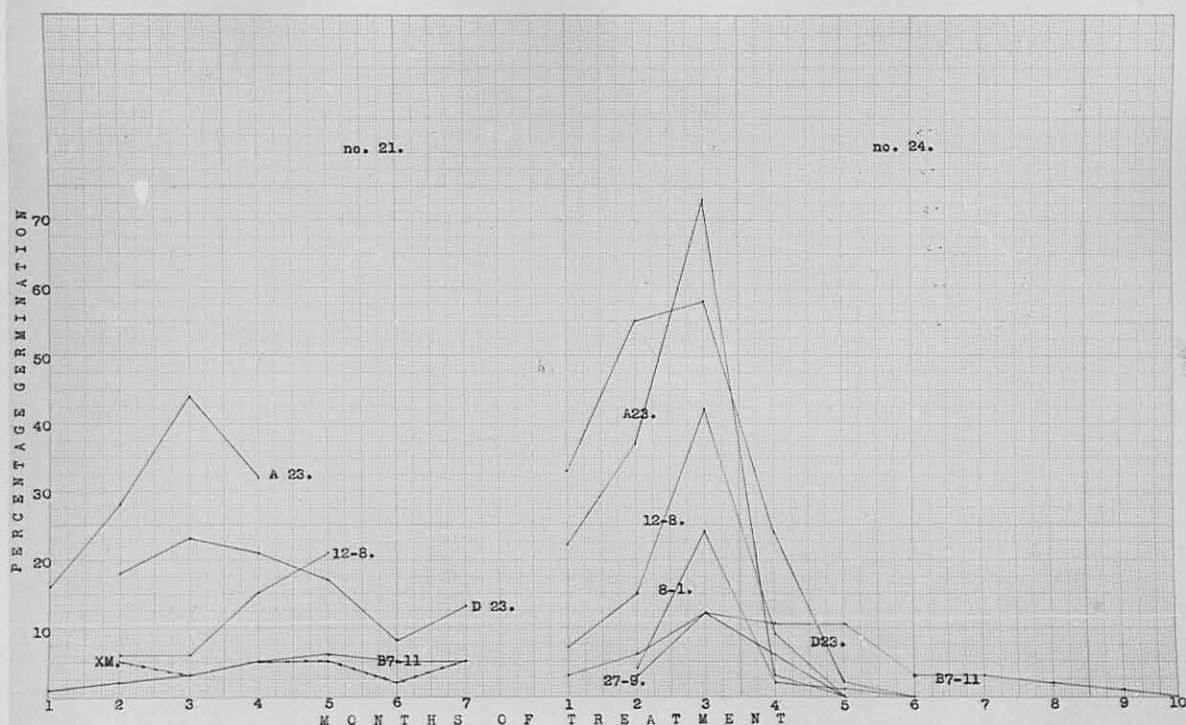


Fig. 25. (Test no. 21). The course of delayed germination of seed of Digitaria A23, D23, 12-8 and "Molopo", and of Panicum minus B7-11, when kept in an open container inside a domestic refrigerator.

(Test no. 24). The course of delayed germination of seed of Digitaria A23, D23, 12-8, 8-1 and 27-9, and of Panicum minus B7-11, when kept in a sealed glass container at 90% humidity inside an incubator running at ca. 25°C.

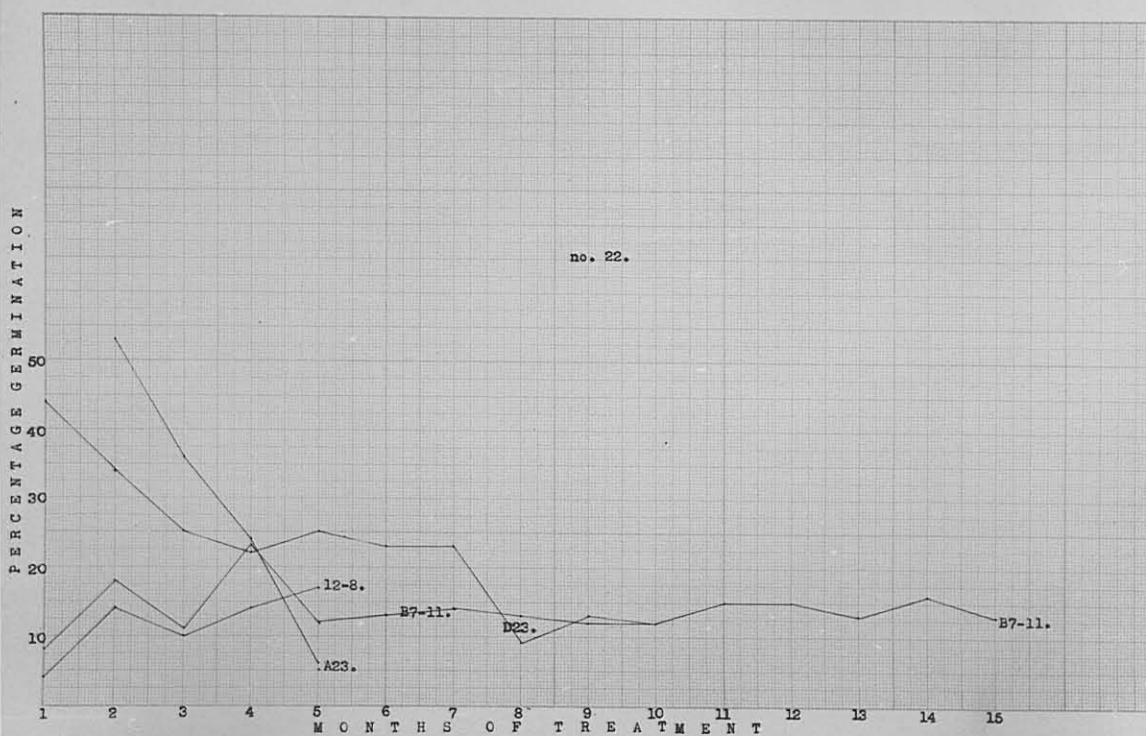


Fig. 26. (Test no. 22). The course of delayed germination of seed of Digitaria A23, D23 and 12-8, and of Panicum minus B7-11, when kept in a sealed glass container at 0 humidity inside a 25°C incubator.

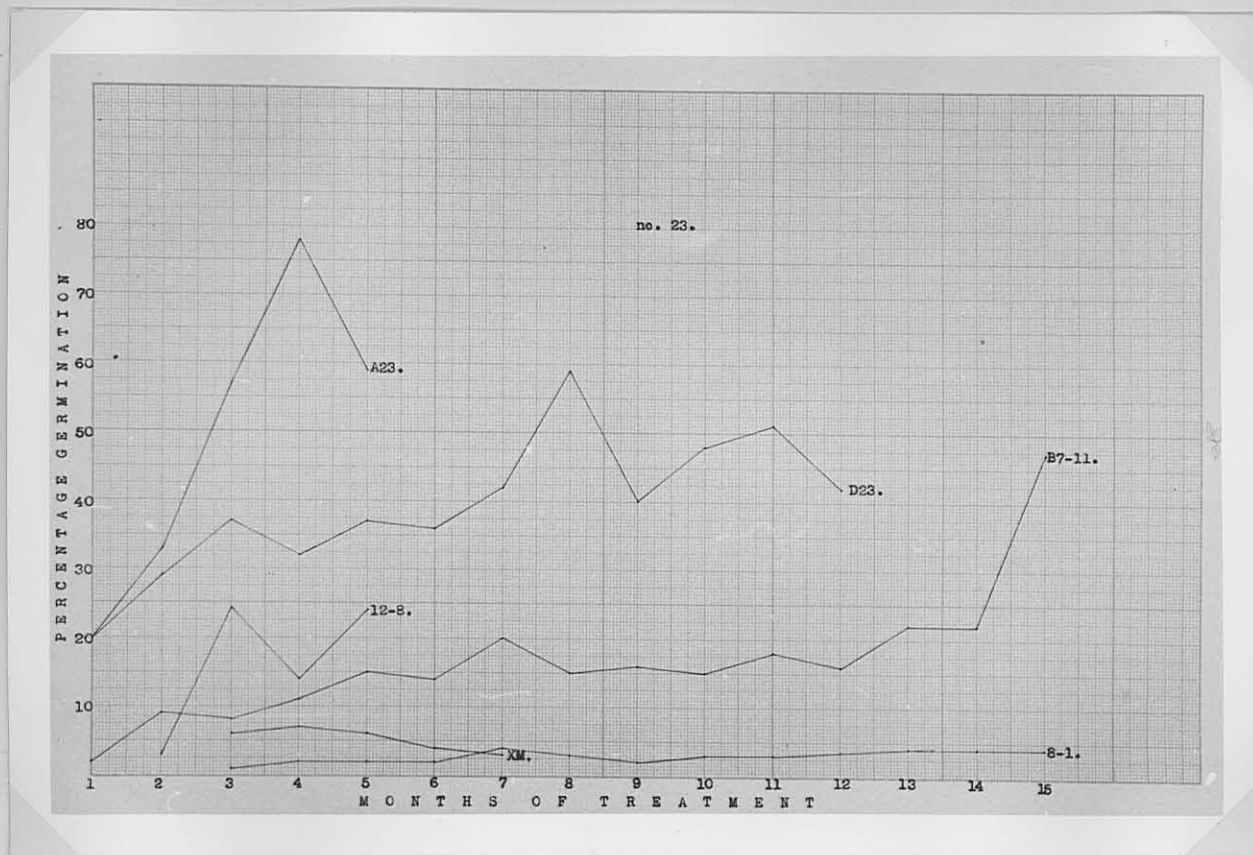


Fig.27.(Test no.23). The course of delayed germination of seed of Digitaria A23, D23, "Molopo", 12-8 and 8-1, and of Panicum minus B7-11, when kept in a sealed glass container at 50% humidity inside a ca. 25°C. incubator.

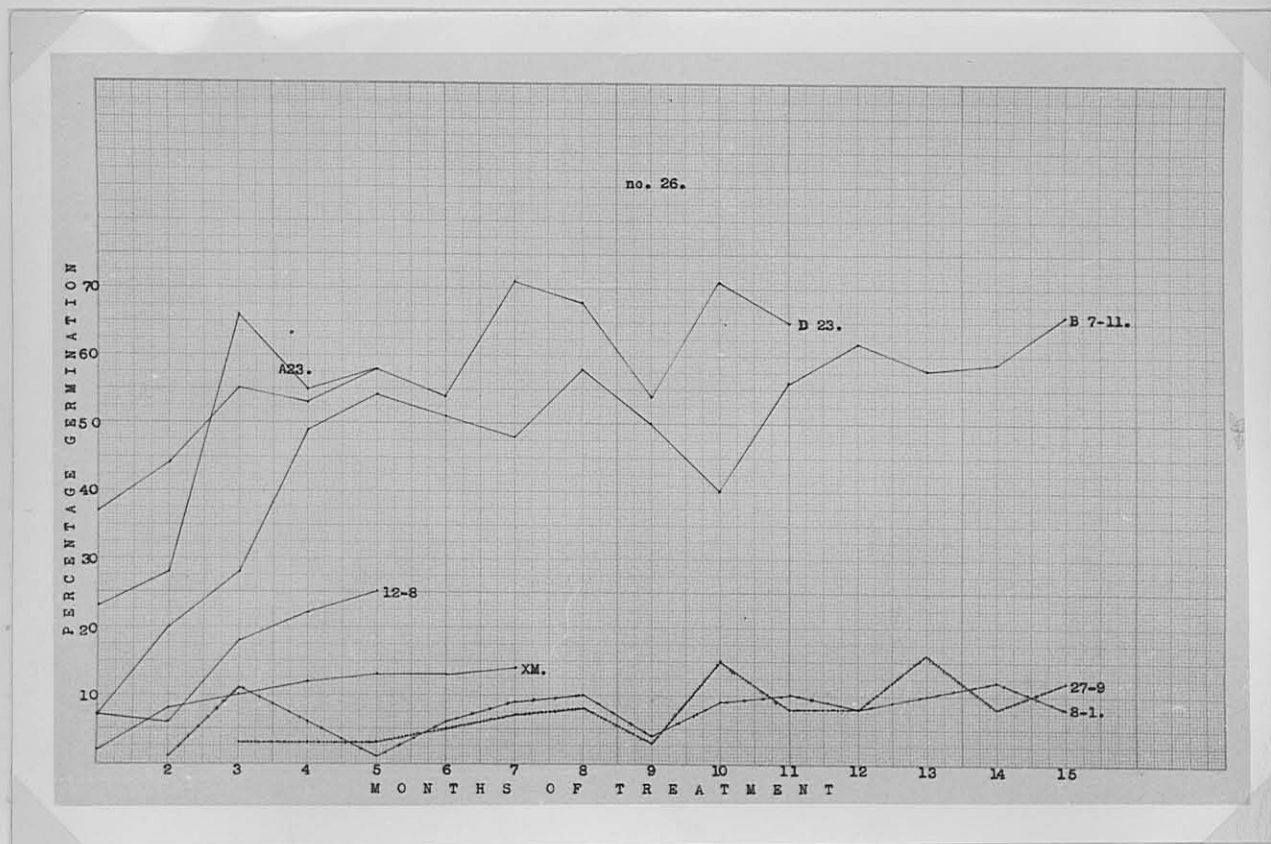


Fig.28.(Test no. 26). The course of delayed germination of seed of Digitaria A23, D23, "Molopo", 12-8, 8-1 and 27-9, and of Panicum minus B7-11, when kept in an open container inside in an incubator run at ca. 25 C.

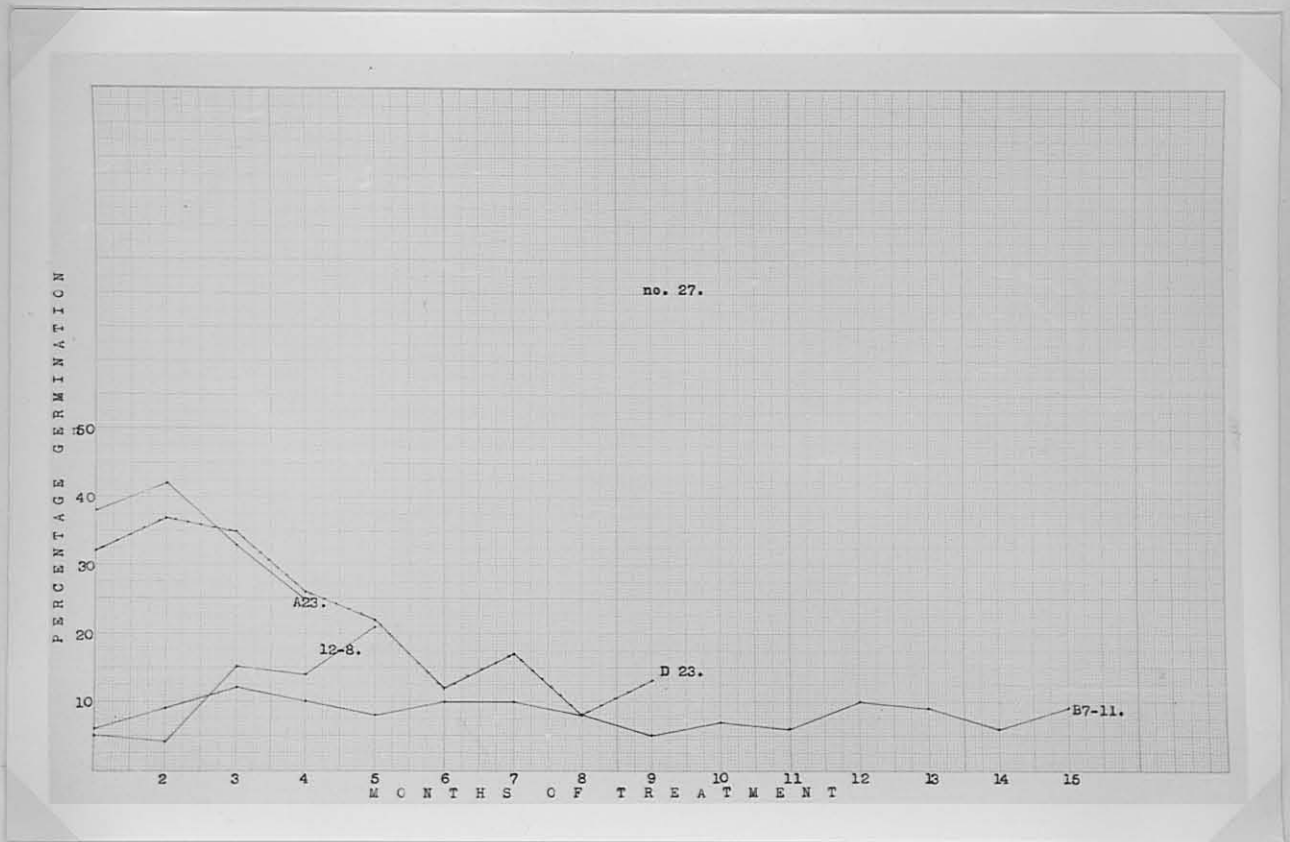


Fig. 29. (Test no. 27). The course of delayed germination of seed of Digitaria A23, D23, and 12-8, and of Panicum minus B7-11, when kept in a sealed glass container at 0 humidity inside an incubator run at ca. 35°C.

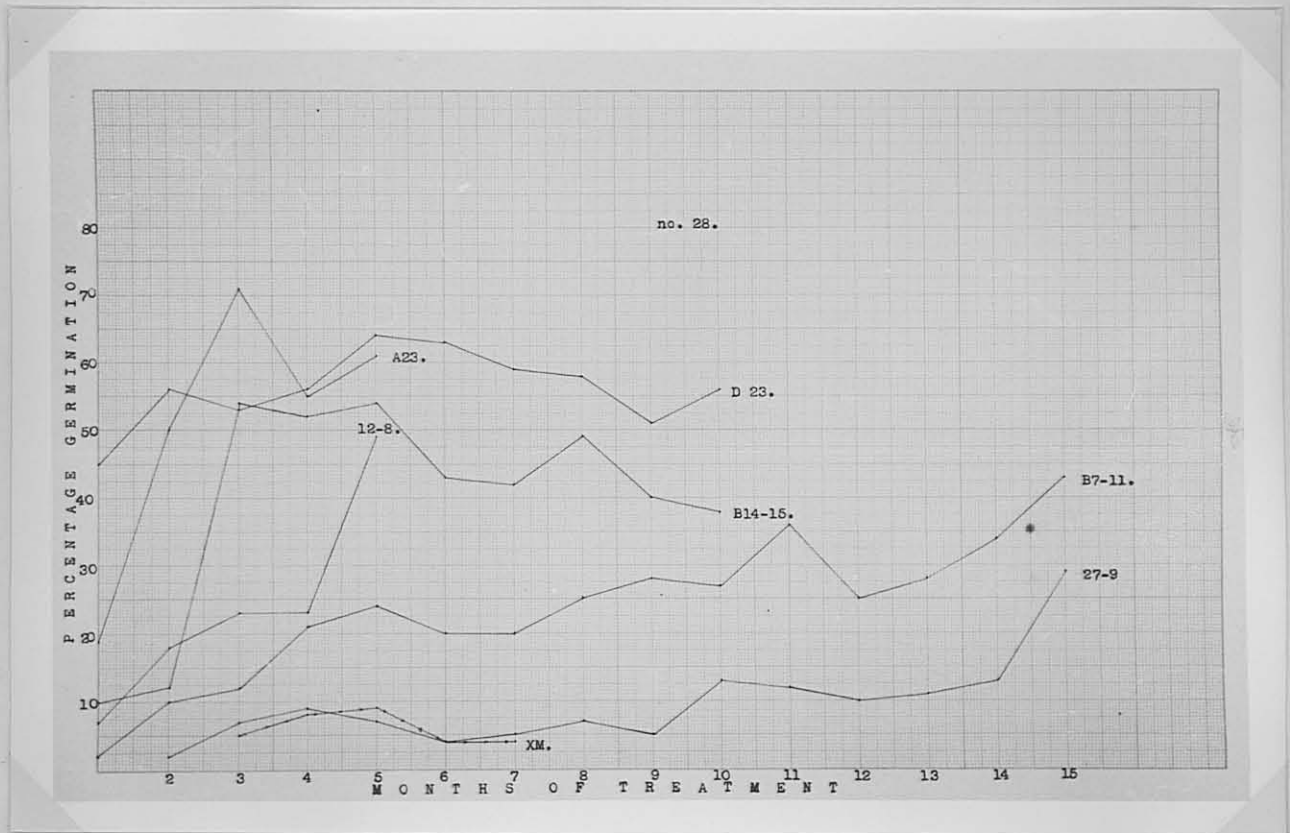


Fig. 30. (Test no. 28). The course of delayed germination of seed of Digitaria A23, D23, "Molopo" 12-8, and 27-9, of Panicum minus B7-11 and of Echinochloa pyramidalis B14-15, when kept in a sealed glass container at 50% humidity inside an incubator run at ca. 35°C.

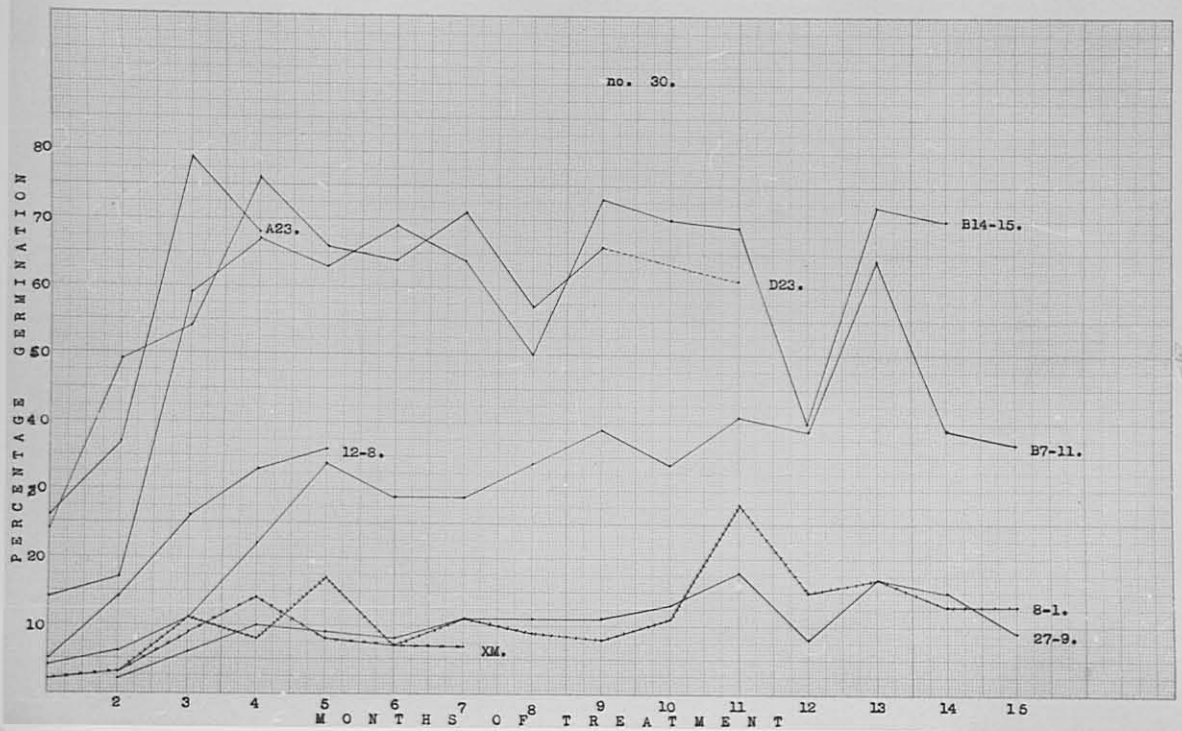


Fig. 31. (Test no.30). The course of delayed germination of the seed of *Digitaria* A23, D23, "Molopo", 8-1, 12-8 and 27-9, of *Panicum minus* B7-11 and of *Echinochloa pyramidalis* B14-15, when kept in a sealed container with uncontrolled humidity (sealed after every monthly test) inside an incubator run at ca.35°C.

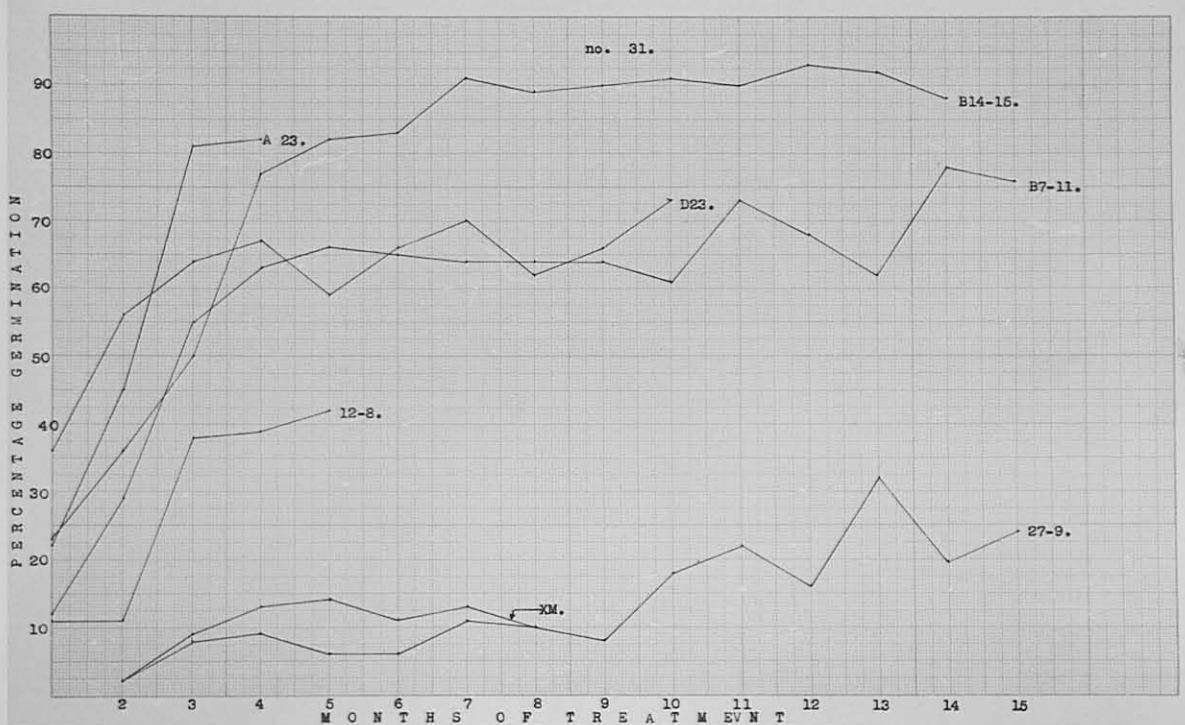


Fig. 32. (Test no.31). The course of delayed germination of seed of *Digitaria* A23, D23, "Molopo", 12-8 and 27-9, of *Panicum minus* B7-11 and of *Echinochloa pyramidalis* B14-15, when kept in an open container inside an incubator run at ca.35°C.

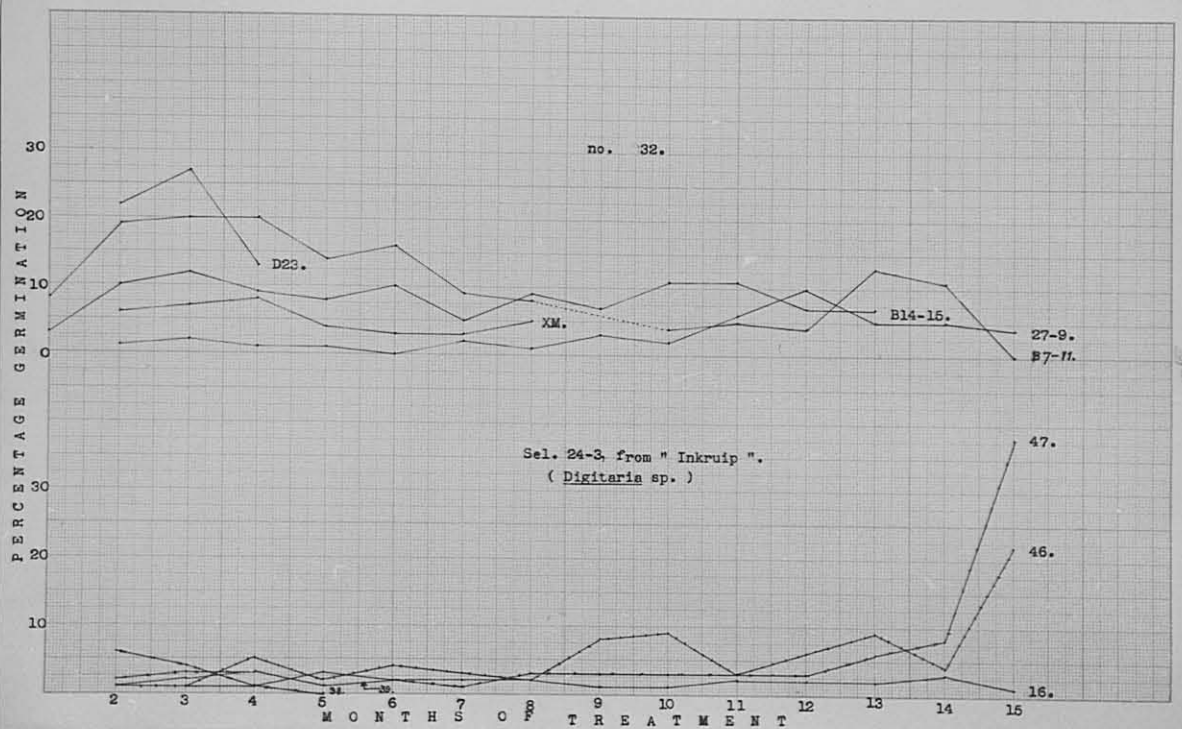


Fig. 33. (Test no. 32). The course of delayed germination of seed of Digitaria D23, "Molopo", and 27-9, of Panicum minus B7-11 and of Echinochloa pyramidalis B14-15, when kept in a sealed glass container at 0 Humidity inside an incubator run at 45°C.

(Digitaria seln. 24-3). The effect of 5 incubator treatments on the course of delayed germination on the seed of Digitaria 24-3. (The numbers of the graphs refer to the even-numbered treatments described in the text).

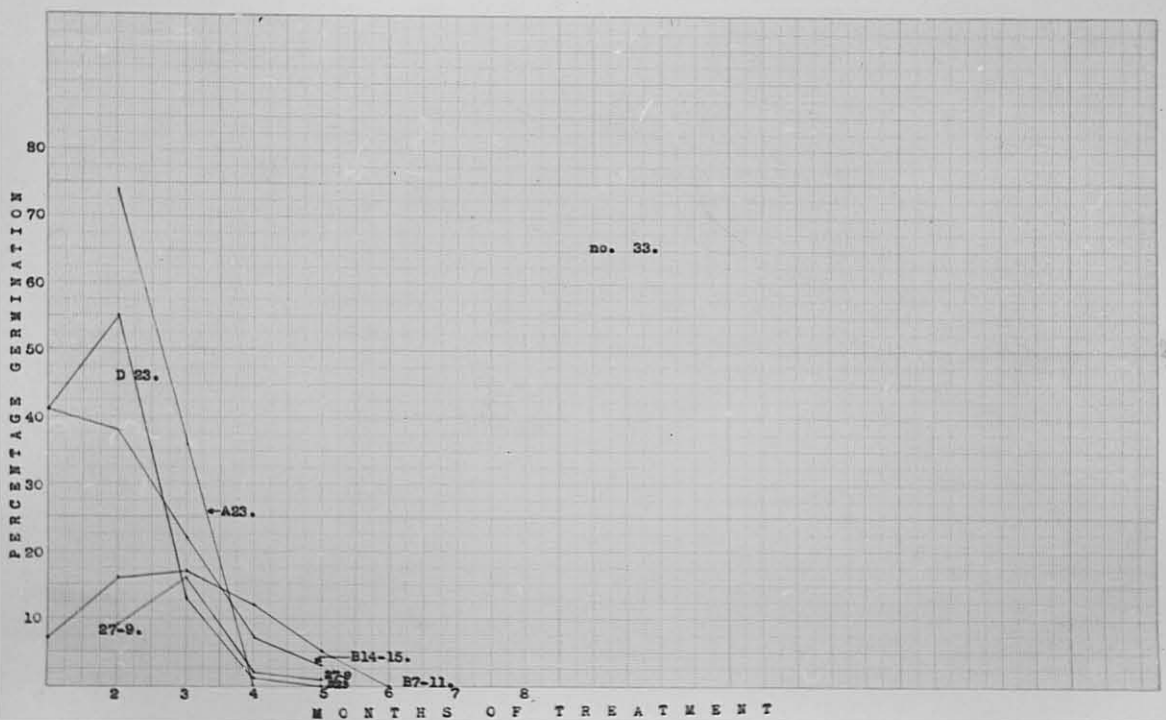


Fig. 34. (Test no. 33.). The course of delayed germination of seed of Digitaria D23, A23 and 27-9, of Panicum minus B7-11 and of Echinochloa pyramidalis B14-15.

80% by 48°C

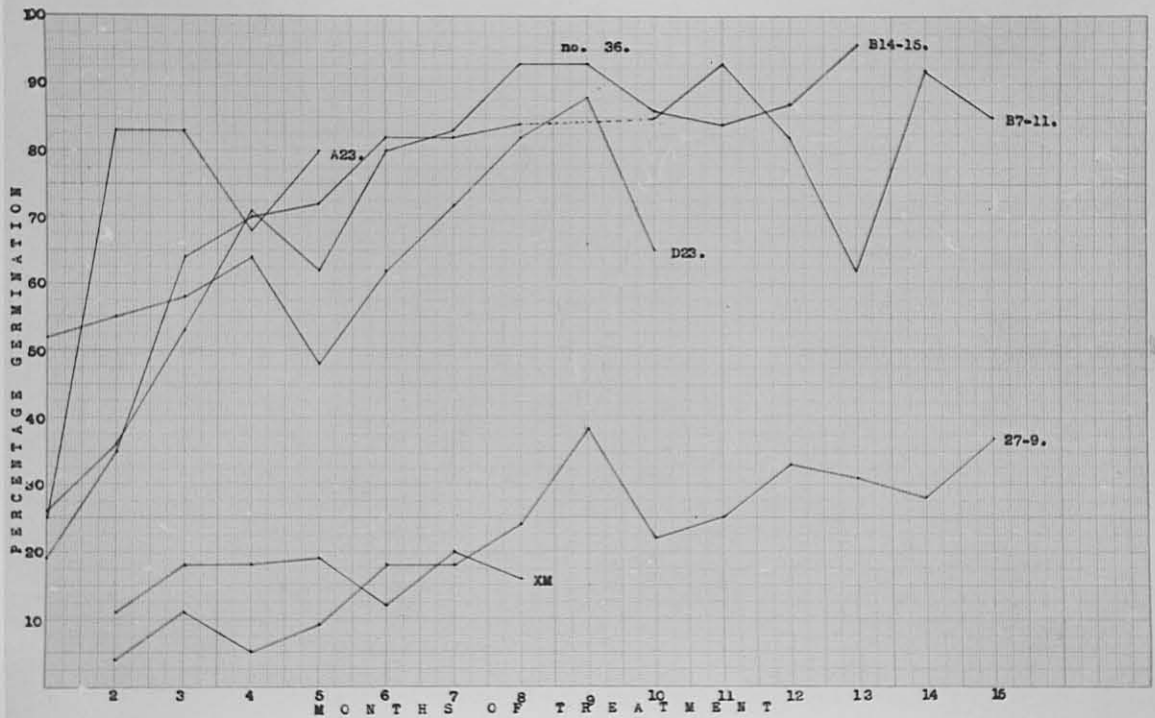


Fig.35. (Test no.36). The course of delayed germination of seed of Digitaria A23, D23 and "Molopo", and 27-9, of Panicum minus B7-11 and of Echinochloa pyramidalis B14-15, when kept in an open container inside an incubator run at ca.45°C.

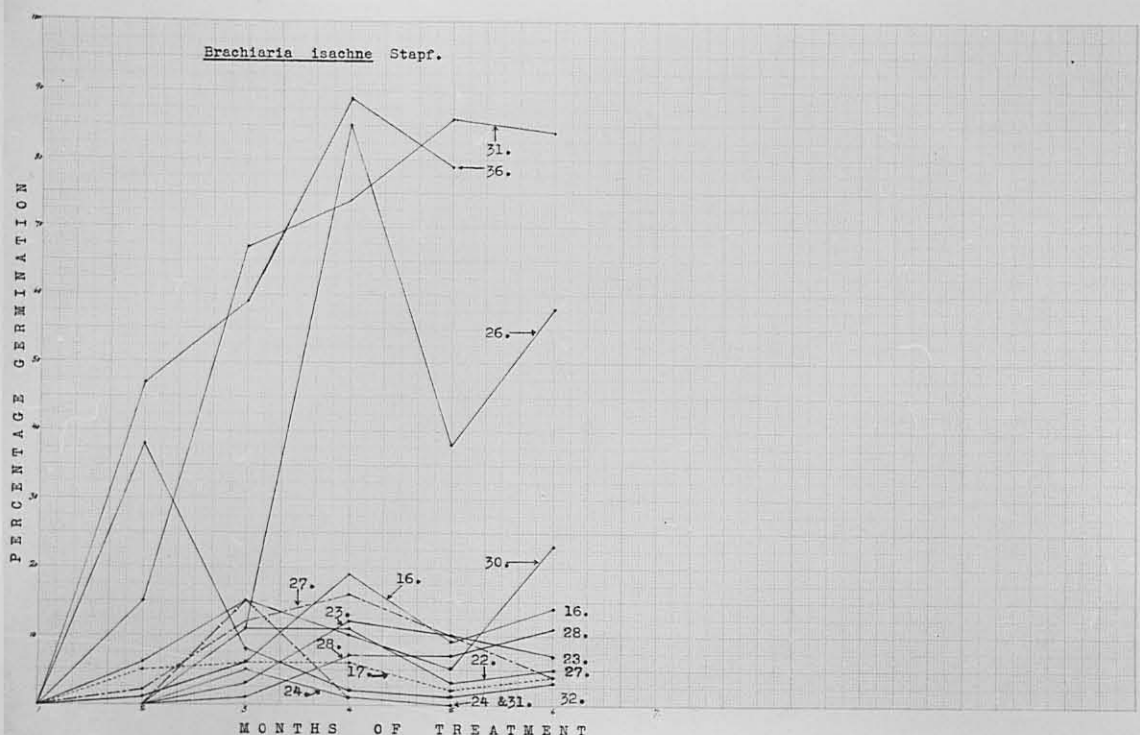


Fig.36. The effect of 13 incubator treatments on the course of delayed germination of Brachiaria isachne. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

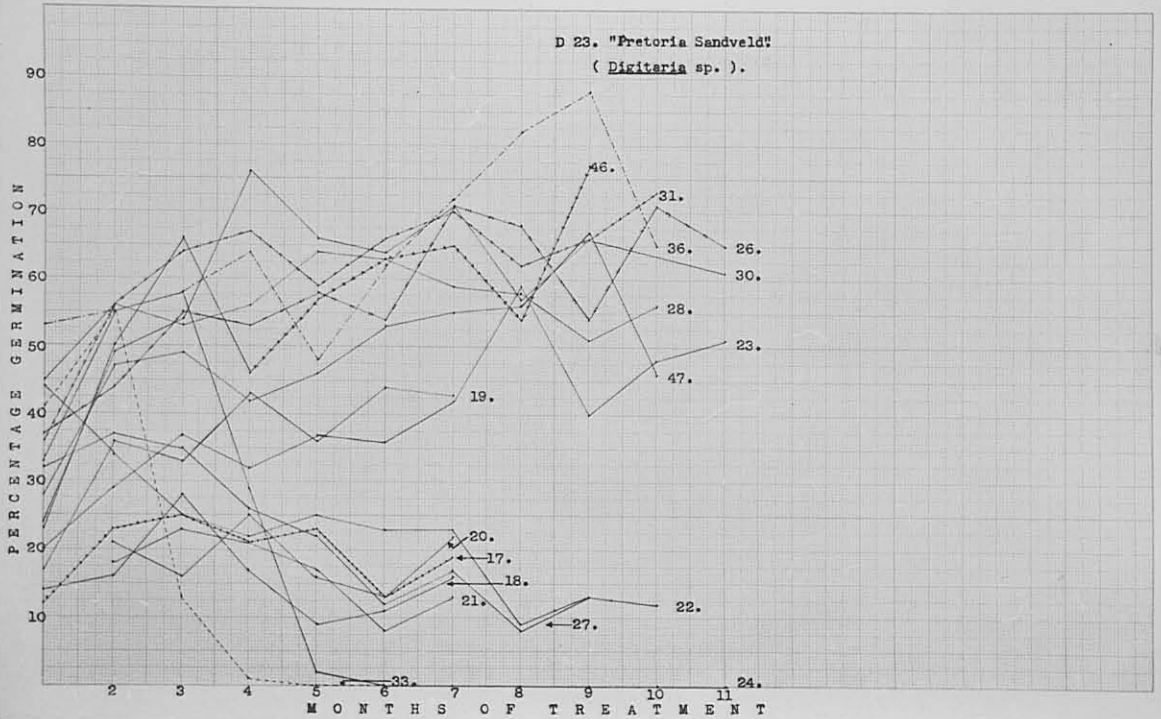


Fig. 37. The effect of 19 incubator treatments on the course of delayed germination of seed of *Digitaria* D23. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

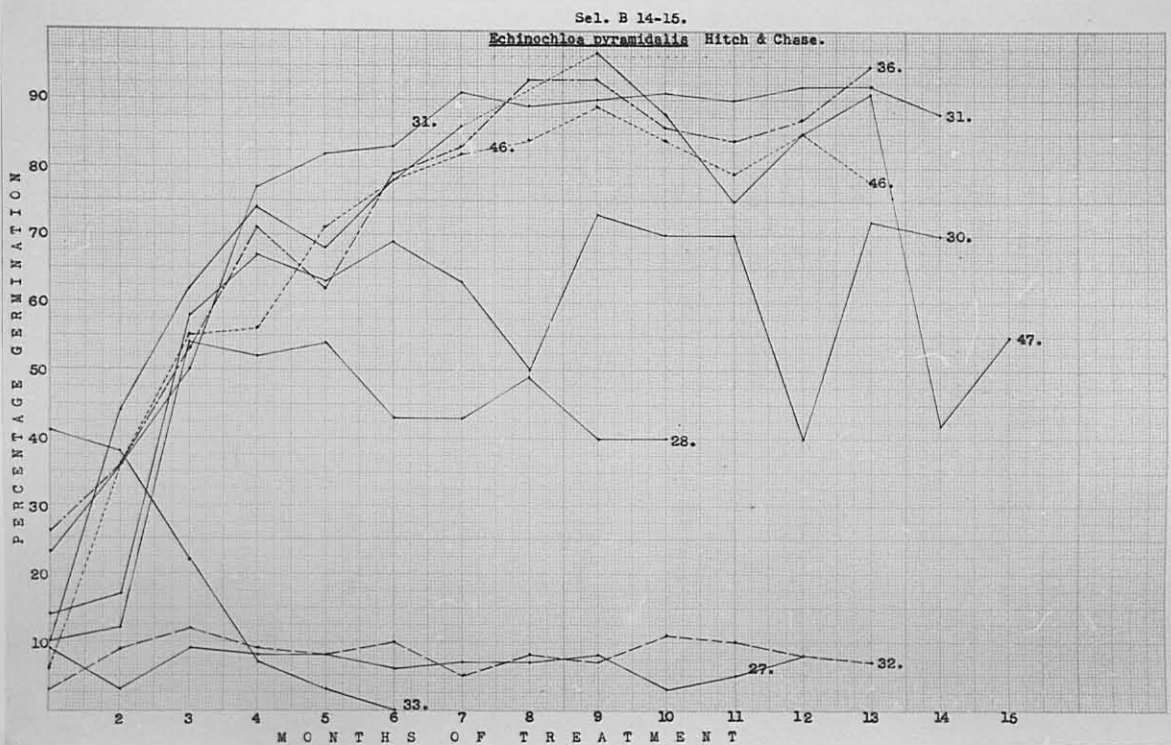


Fig. 38. The effect of 9 incubator treatments on the course of delayed germination of seed of *Echinochloa pyramidalis* B14-15. (The numbers of the graphs refer to the even-numbered treatments described in the text).

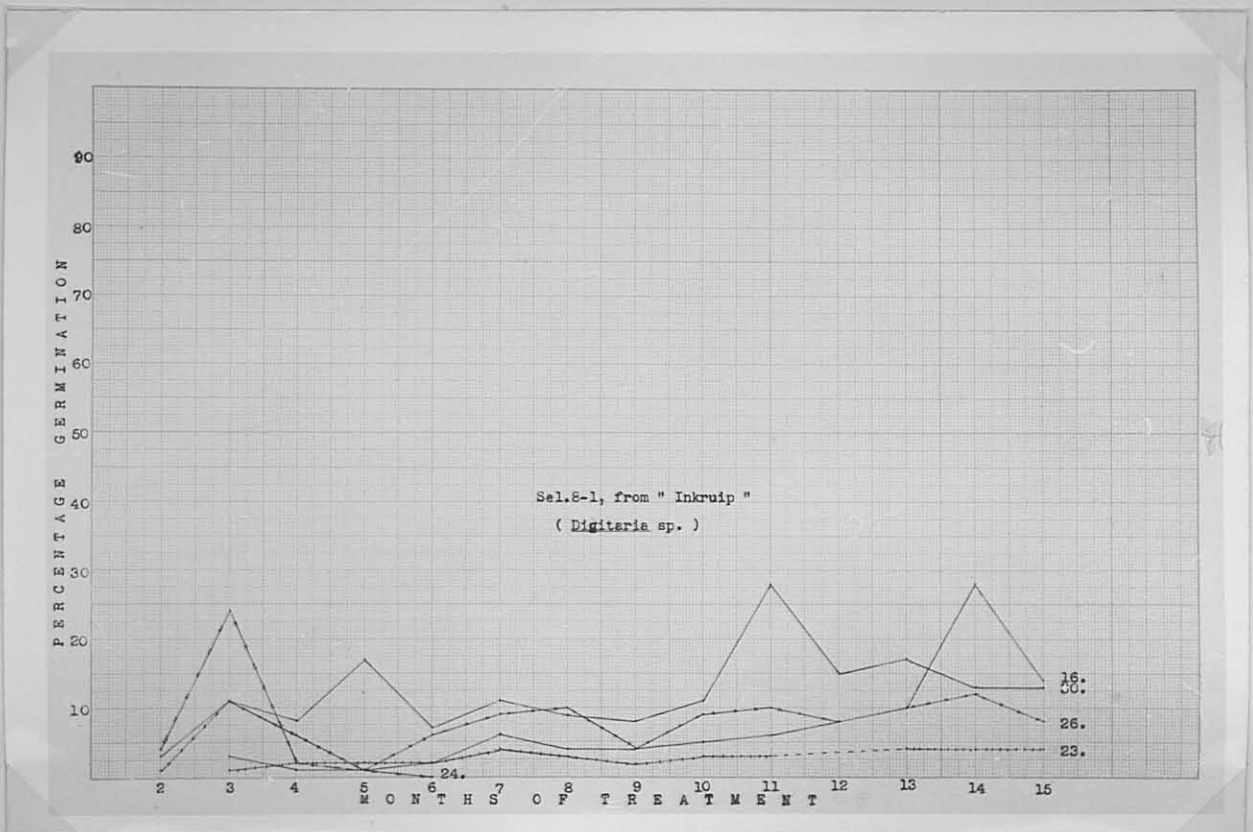


Fig. 39. The effect of 5 incubator treatments on the course of delayed germination of seed of Digitaria 8-1. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

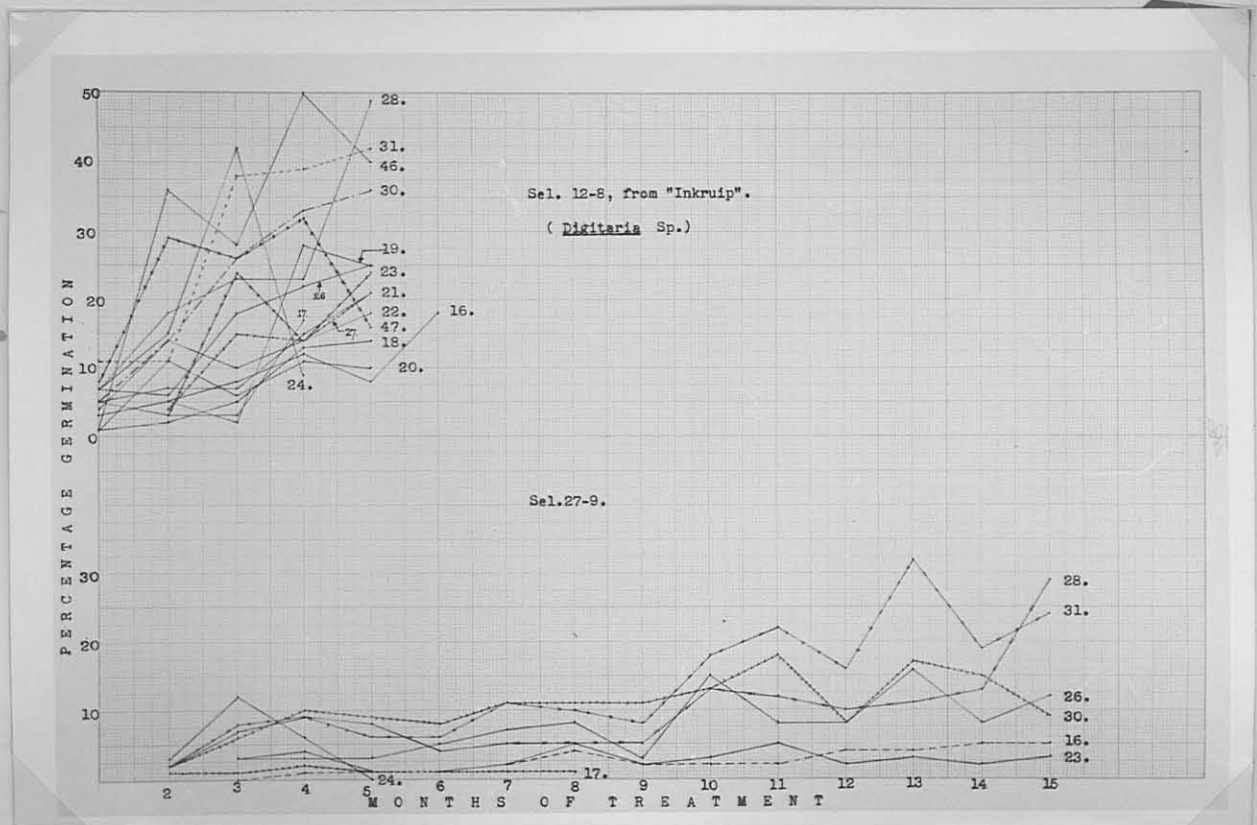


Fig. 40. (Digitaria line 12-8). The effect of 16 incubator treatments on the course of delayed germination of seed of Digitaria 12-8. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

(Digitaria line 27-9). The effect of 8 incubator treatments on the course of delayed germination of seed of Digitaria 27-9. (The numbers of the graphs refer to the even-numbered treatments described in the text.)

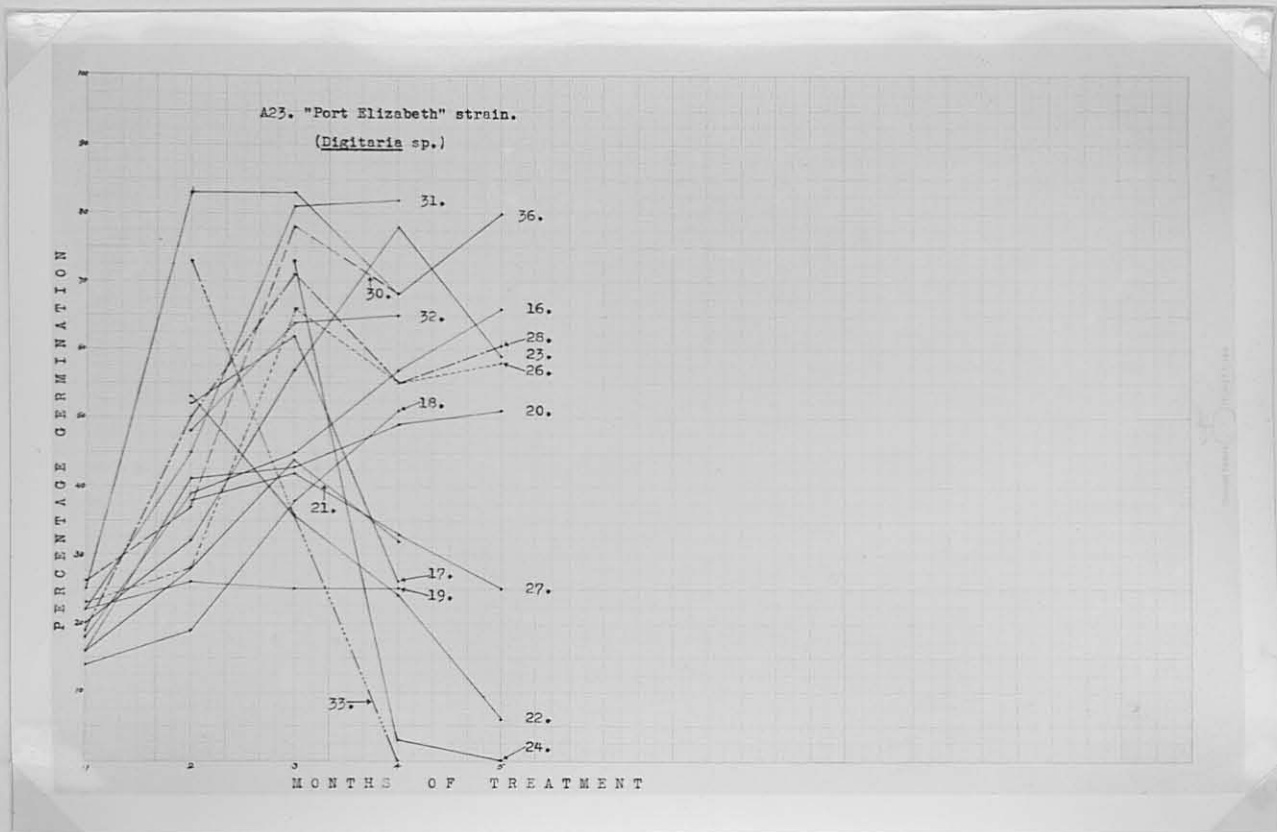


Fig.41. Showing the effect of 17 incubator treatments on the course of delayed germination of seeds of *Digitaria* ecotype A.23. The numbers of the graphs refer to the even-numbered treatments described in the text.

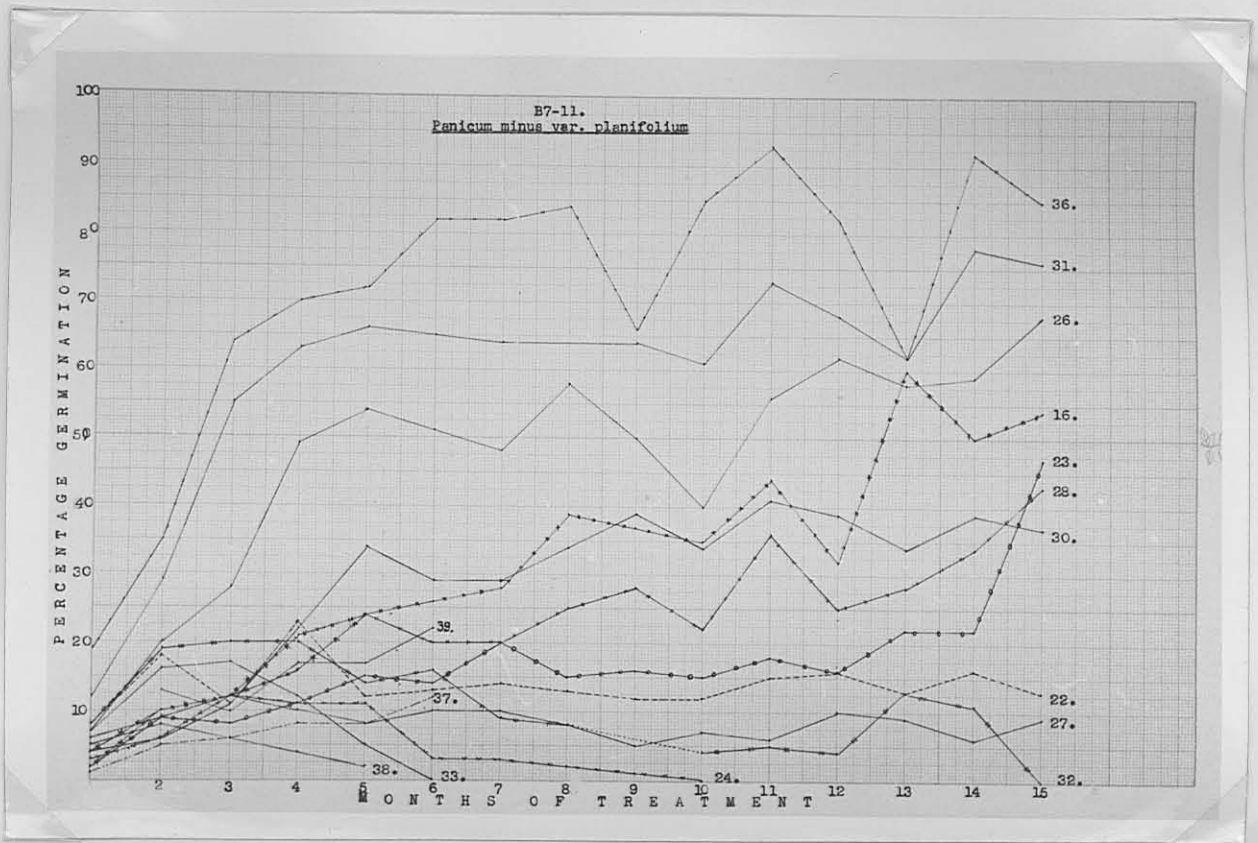


Fig. 42. Showing the effect of 15 incubator treatments on the course of delayed germination of seed of Panicum minus B.7-11. The numbers of the graphs refer to the even-numbered treatments described in the text.

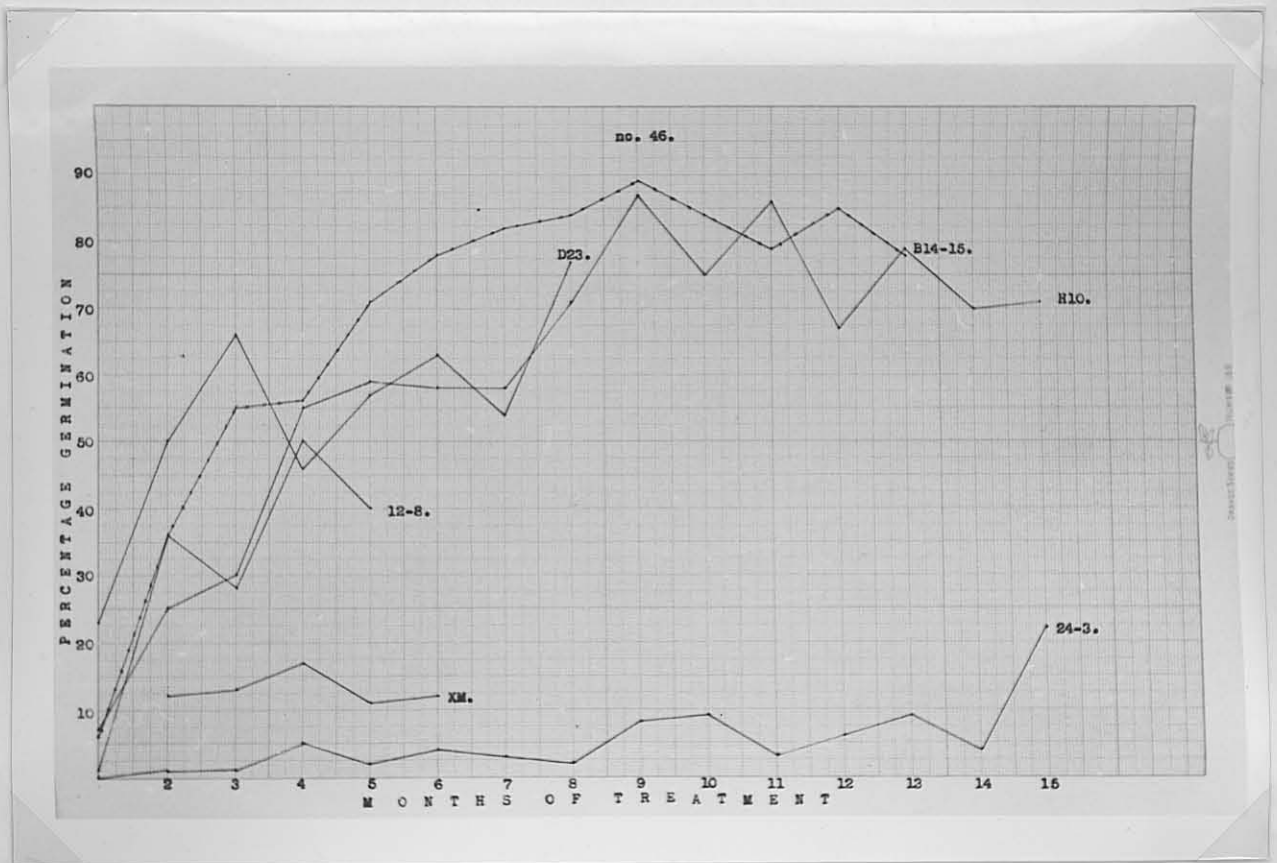


Fig. 43. (Test no.46). Showing the effect on the delayed germination of seeds of Digitaria lines 24-3 and 12-8 and ecotypes D.23. and "molopo"; of Echinochloa pyramidalis B.14-15; and of Setaria sphacelata H.10, when their dry seeds were subjected to alternating temperatures of 6 hrs. at 25°C. and 18 hrs. at 45°C. (at atmospheric humidity).

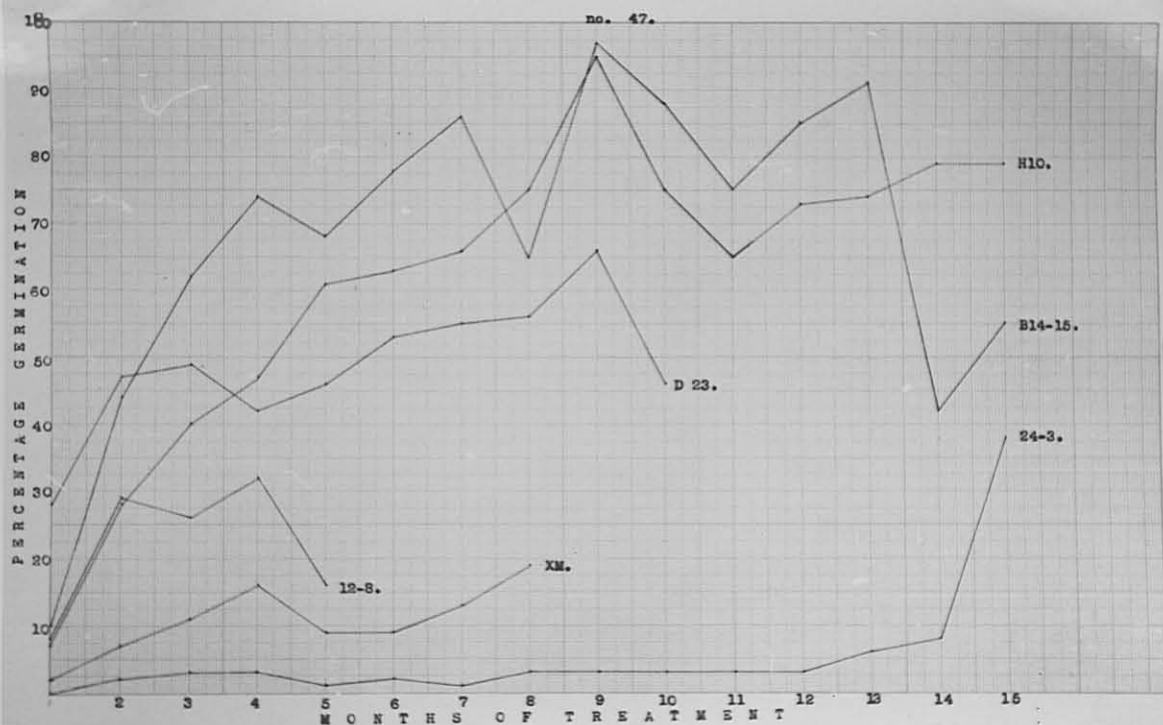


Fig. 44. (Test no.47). Showing the effect on the delayed germination of seeds of Digitaria lines 24-3 and 12-8 and ecotypes D.23 and "molopo"; of Echinochloa pyramidalis B.14-15; and of Setaria sphacelata H.10, when their dry seeds were subjected to alternating temperatures of 18 hrs. at 25° and 6 hrs. at 45° C (at atmospheric humidity).

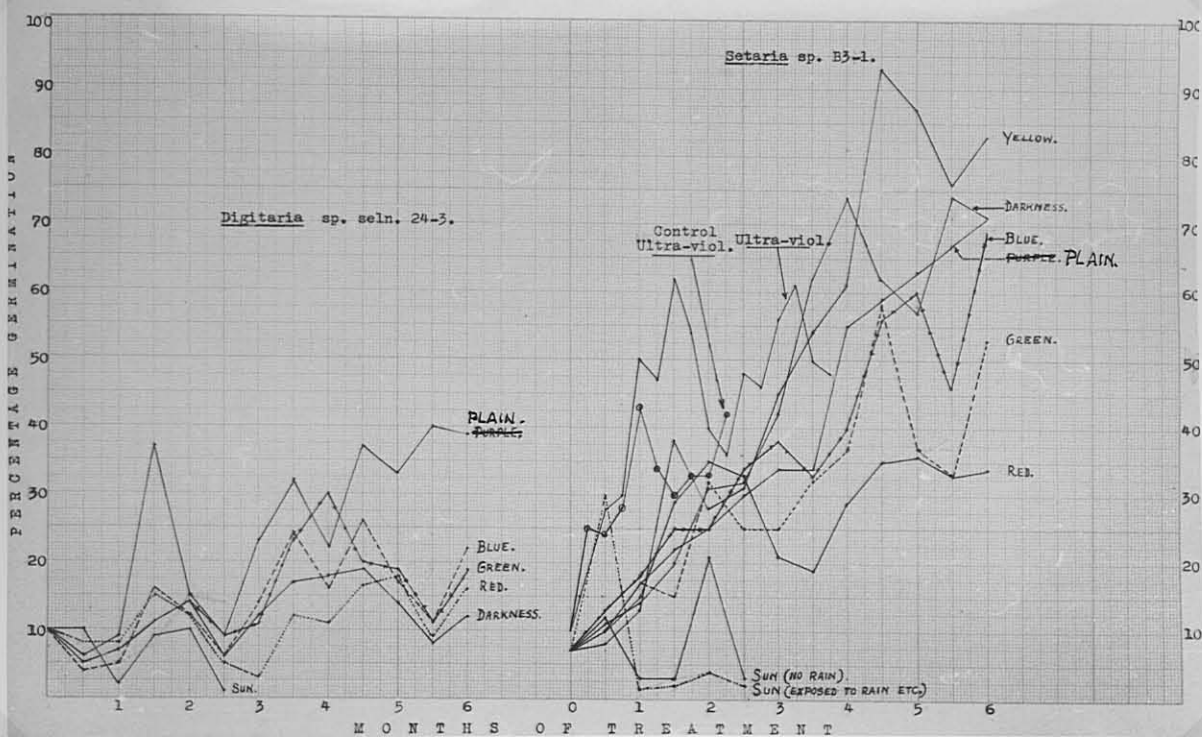


Fig. 45. Showing the effect of ultraviolet light on the delayed germination of Setaria line B.3-1 (treating dry seeds); and of the effect of plain glass, red, yellow, green and blue 'filters', used in conjunction with sunlight, as well as full exposure and darkness treatments outdoors, on the delayed germination of Setaria B.3-1 and Digitaria seln. 24-3.

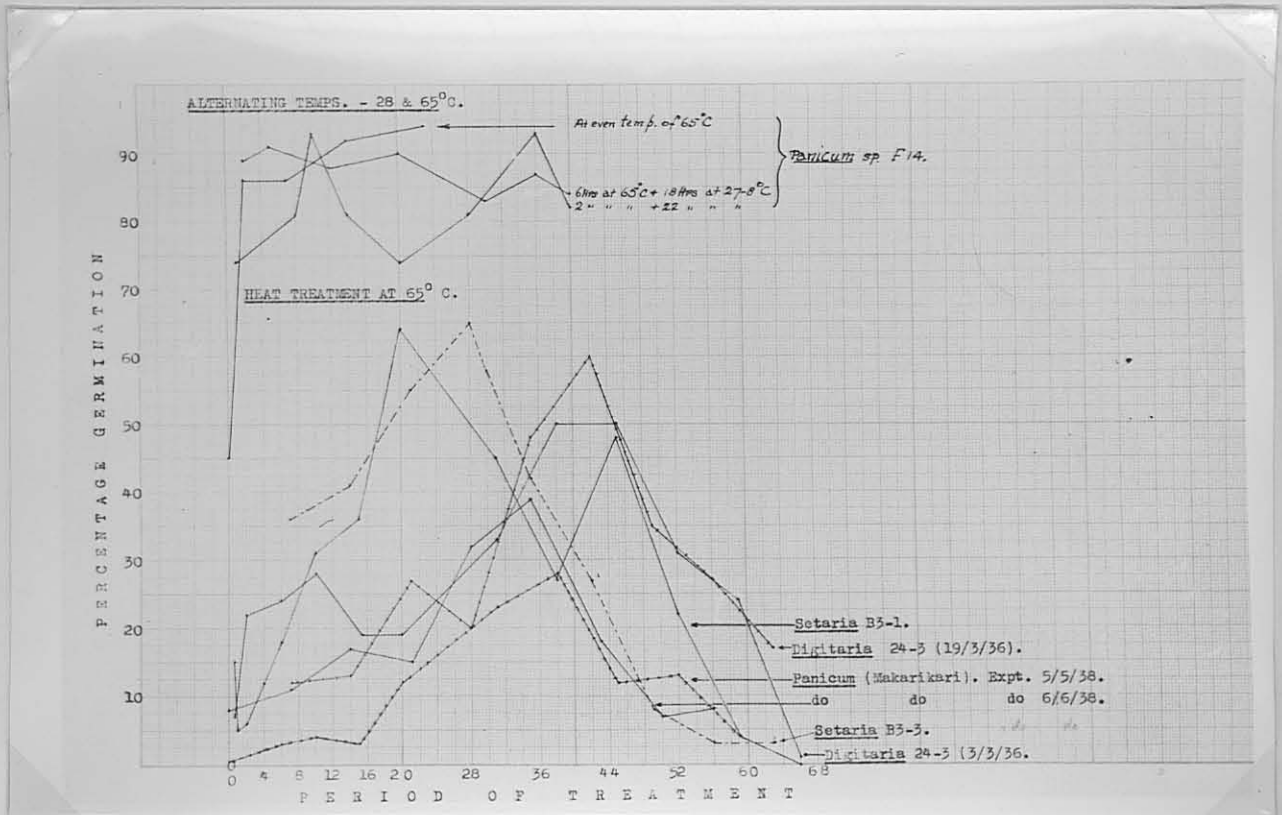


Fig. 46. Showing the effect of alternating temperatures of 28° and 65°C on the delayed germination of Panicum minus F.14 (treating dry seeds); and of heat (65°), on that of Setaria lines B.3-1 and B.3-3; on Panicum ecotype "makarikari"; and on Digitaria line 24-3.

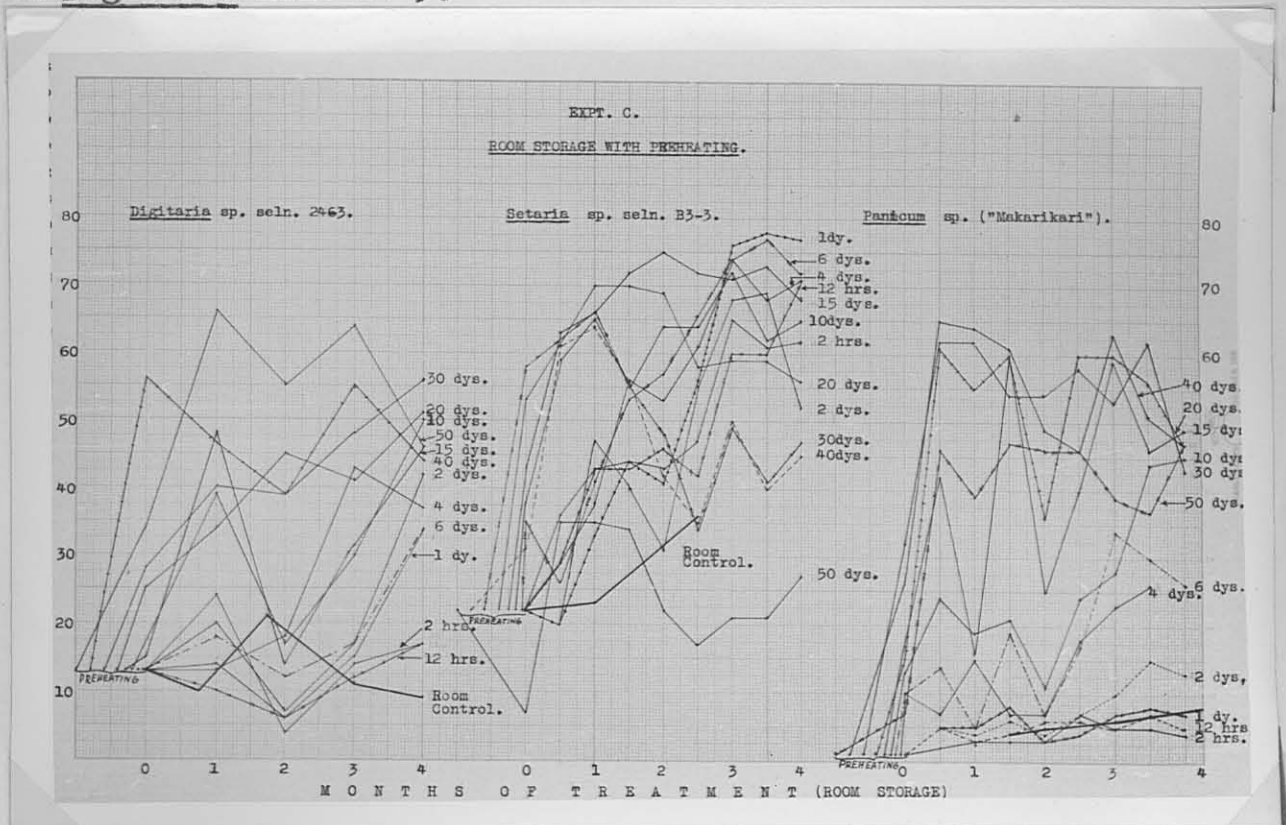


Fig. 47. (Expt.C.). Showing the effect of room storage with preheating at 65° for various periods from 2 hrs. to 50 dys. on the delayed germination of Digitaria line 24-3, Setaria seln. B.3-3 and Panicum sp. "makarikari" ecotype.

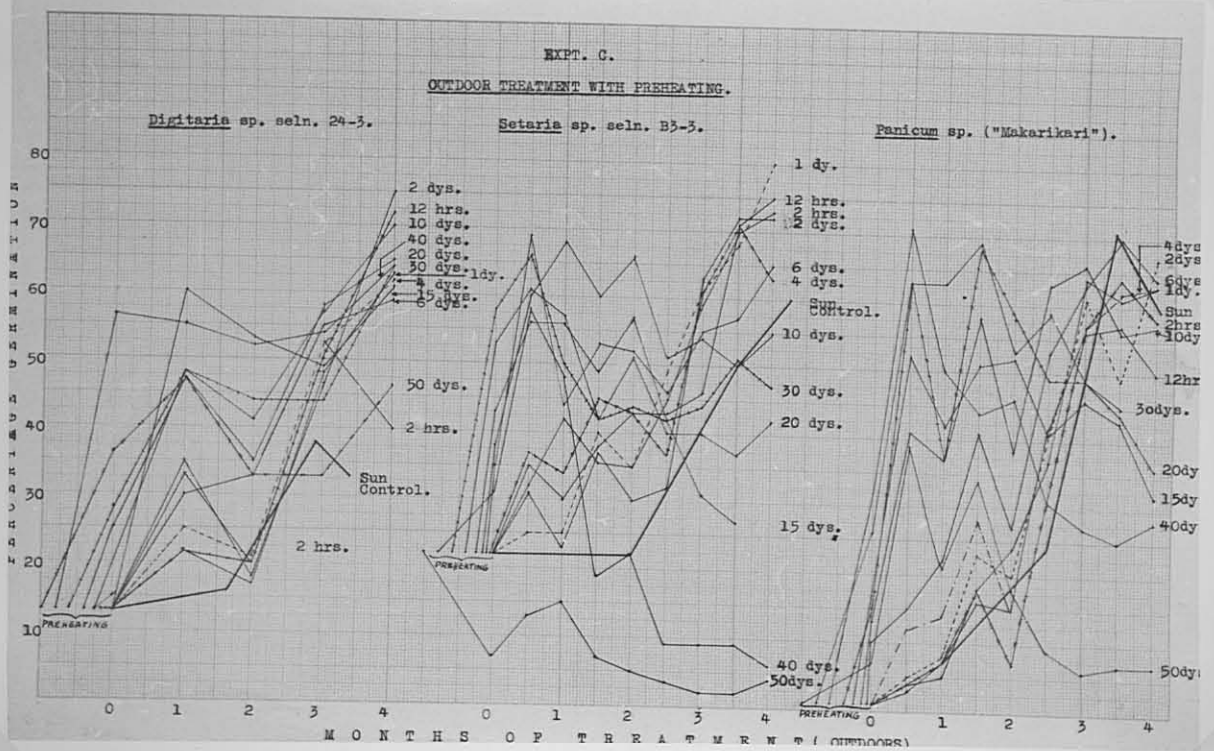


Fig. 48. (Expt.C). Showing the effect of outdoor storage with preheating at 65°C., for various periods from 2 hrs. to 50 days on the delayed germination of *Digitaria* line 24-3, *Setaria* sel. B.3-3 and *Panicum* sp. ("makarikari" ecotype).

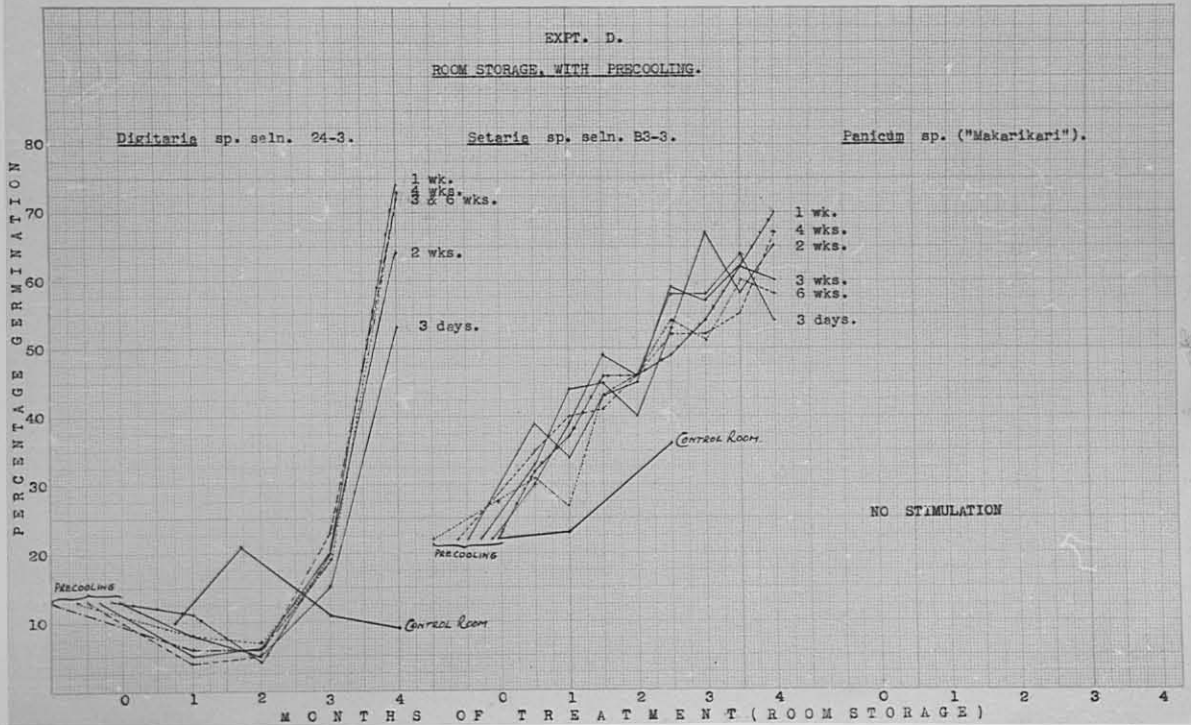


Fig. 49. (Expt.D). Showing the effect of room storage with precooling at 3°C for various periods from 3 days to 6 weeks on the delayed germination of *Digitaria* line 24-3, *Setaria* seln. B.3-3 and *Panicum* sp. ("makarikari" ecotype.)

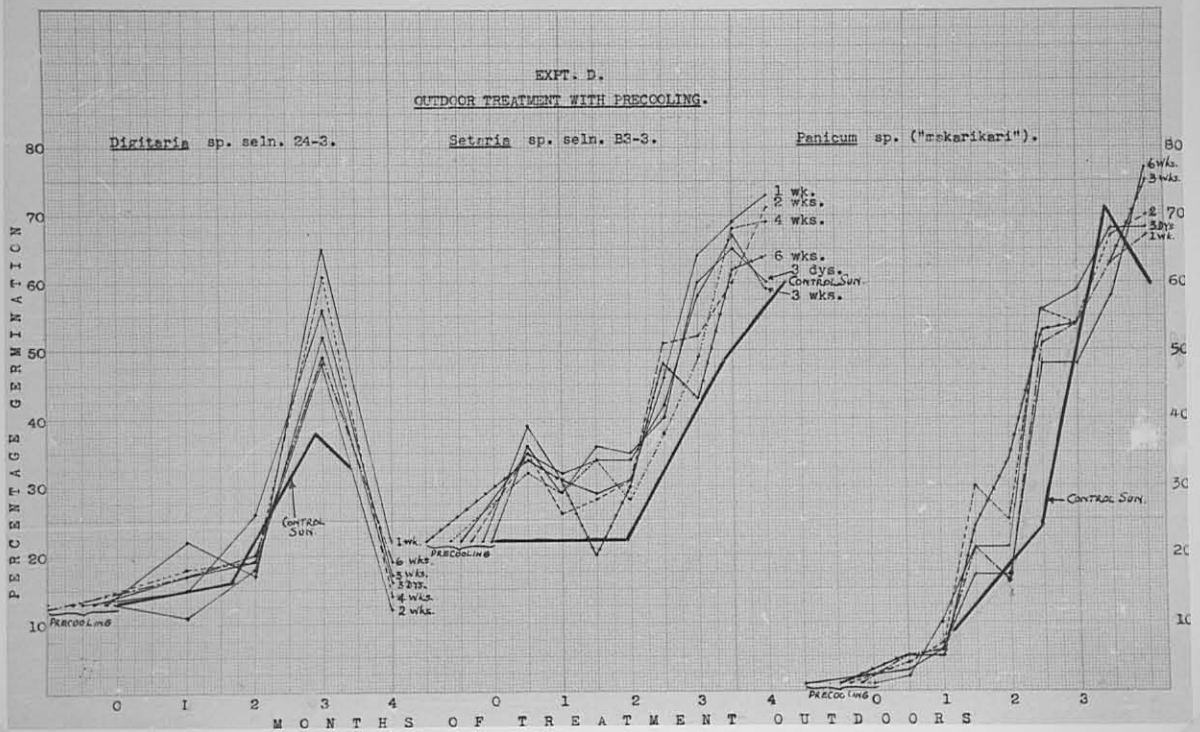


Fig. 50. (Expt. D). Showing the effect of outdoor storage with precooling at 3°C, for various periods from 3 days to 6 weeks on the delayed germination of *Digitaria* line 24-3, *Setaria* seln. B.3-3 and *Panicum* sp. ("makarikari" ecotype).

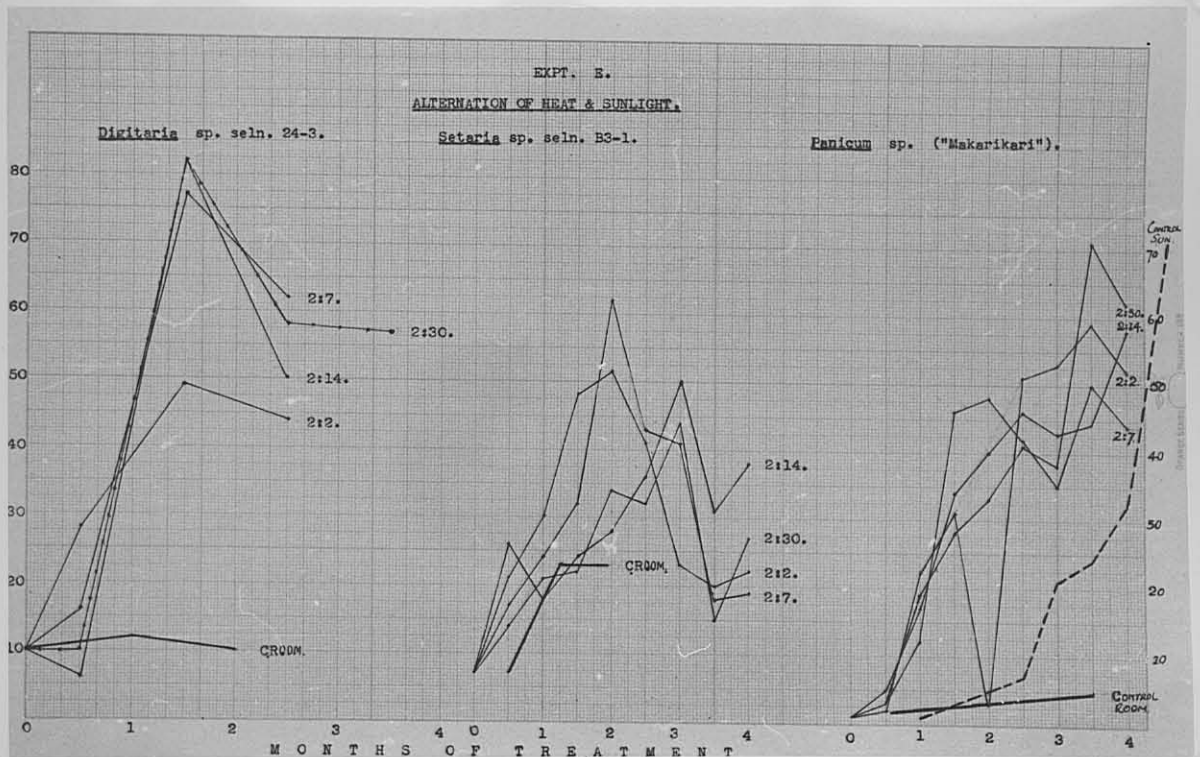


Fig. 51. (Expt. E). Showing the effect of alternations of heat (65°C) and sunlight of respectively, (a) 2 hrs. : 2 days; (b) 2 days : 7 days; (c) 2 days : 14 days and (d) 2 days : 30 days, on the delayed germination of *Digitaria* line 24-3, *Setaria* seln. B.3-1 and *Panicum* sp. ("makarikari" ecotype) when seeds were treated dry.

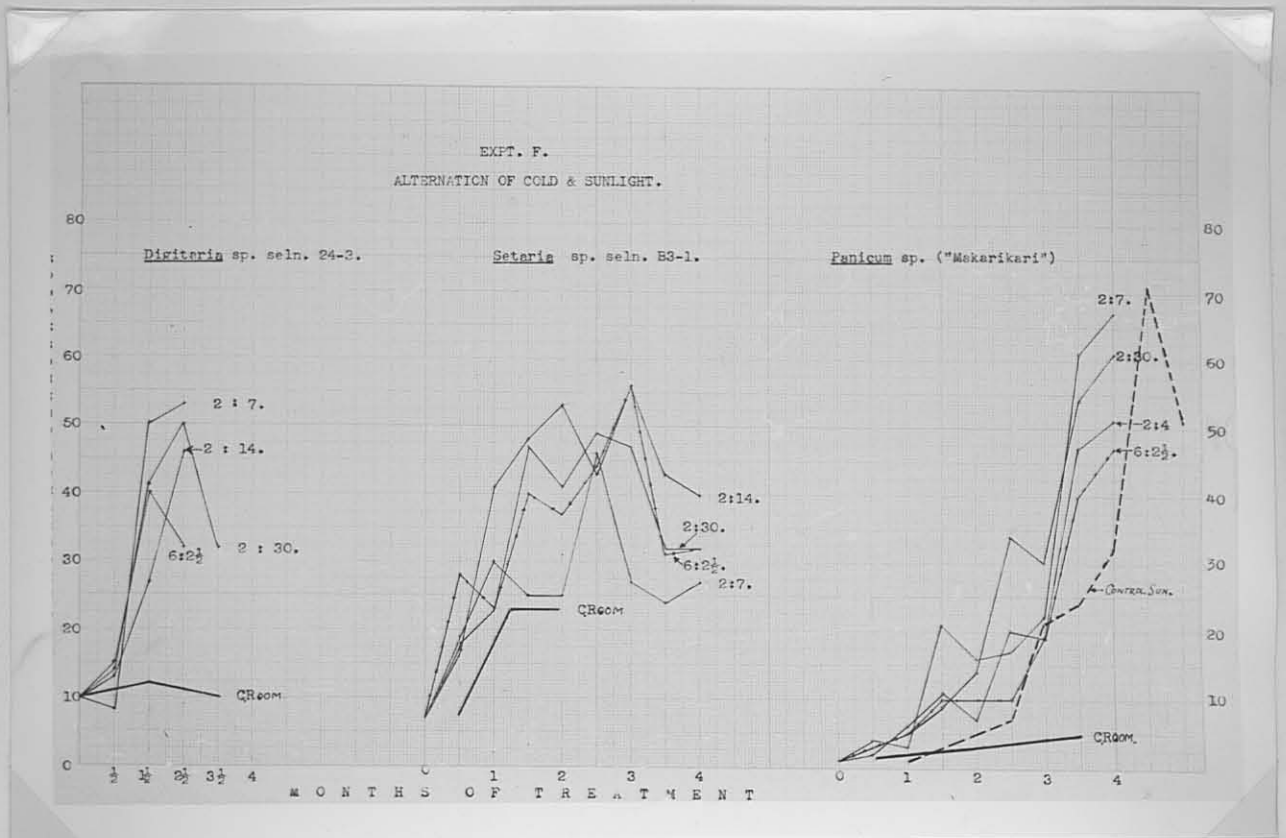


Fig. 52. (Expt.F). Showing the effect of alternations of cold (3°C) and sunlight of respectively, (a) 6 hours: $2\frac{1}{2}$ days; (b) 2 days: 7 days; (c) 2 days: 14 days; (d) 2 days: 30 days, on the delayed germination of Digitaria line 24-3, Setaria sehn. B.3-1 and Panicum sp. ("makarikari" ecotype).

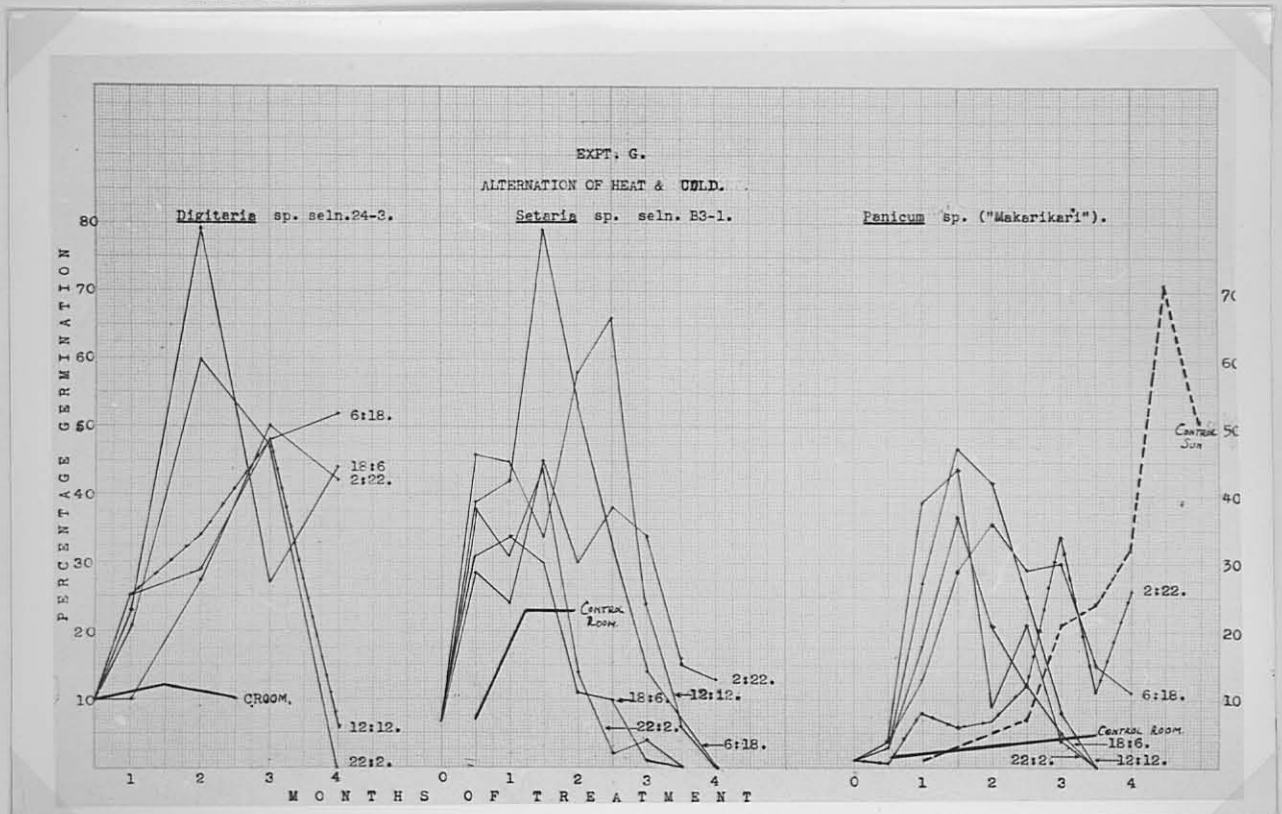


Fig. 53. (Expt.G). Showing the effect of alternations of heat (65°) and cold (3°C) of, respectively, (a) 2 hours: 22 hours; (b) 6 hours: 18 hours; (c) 12 hours: 12 hours; (d) 18 hours: 6 hours; (e) 22 hours: 2 hours, on the delayed germination of Digitaria line 24-3, Setaria sehn. B.3-1 and Panicum sp. ("makarikari" ecotype) when seeds were treated dry.

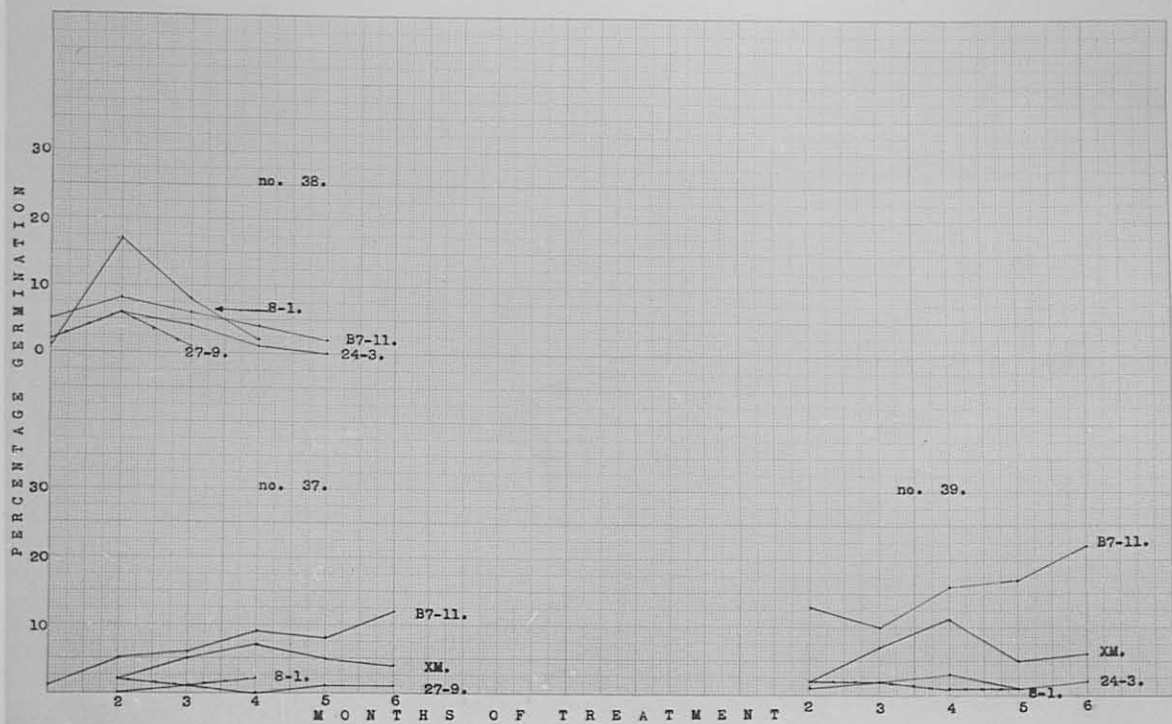


Fig. 54. Showing the effect of the treatment of dry seeds of *Panicum minus* B.7-11 and of *Digitaria* line 27-9 with CO₂ at room temperature (test 37), with CO₂ at 45°C (test 38) and with O₂ at room temperature (test 39), on the course of their delayed germination.