

RULES COMMITTEE REPORT

L. E. Wiesner, Chairman

Proposals for changes in the Rules for Testing Seeds were received. All proposals were reviewed by the committee, and those that appeared adequately justified were recommended for consideration by the Association. These proposals were published in the AOSA Newsletter Vol. 48(1): 38-43, in accordance with the constitution. The following proposals were published:

1. Preinoculated Legume Seed Testing
2. Method of testing for laboratory germination and hard seed of tree and shrub seeds.
3. Additional substrata to be used in conjunction with the new proposal for tree and shrub seeds.
4. Methods of testing for laboratory germination and hard seed of flower seeds.

These proposals were adopted by the AOSA as official rules and will become effective October 1, 1974.

Other proposals for rules changes were received and studied by the Committee. Many of these proposals were on the agenda for discussion at the informal period of the open rules committee meeting.

Rules changes which were adopted at the 1973 AOSA meeting were published in the AOSA Newsletter Vol. 47(3): 16-19.

During the next year the committee will bring together all rules changes which have been made since the 1970 publication of the "Rules for Testing Seeds" and have these changes published in accordance with the recommendation of the Executive Board made in 1973.

Committee members were as follows:

V. M. Stanway
P. N. Grainger
L. E. Everson
E. E. Hardin
L. E. Wiesner (Chairman)

Rules changes adopted at the 1974 AOSA meeting in Little Rock, Arkansas, are as follows:

1. Section 8. (Page 96) Preinoculated Legume Seed Testing. New section:

Methods for conducting seedling tests to determine the effectiveness of inoculation on preinoculated legume seed are outlined in AOSA Handbook No. 30 "Growth Performance Tests for Preinoculated Seed".

2. Section 4.12, Table 5. Methods of testing for laboratory germination and hard seeds, Tree and Shrub seeds. (page 69) Additional species.

<u>Kind of Seed</u>	<u>Substrata^{1/}</u>	<u>Temp. °C.</u>	<u>Test Duration (days)</u>	<u>Additional Directions</u>
<u>Aesculus pavia</u> red buckeye	TC	20-30	28	--
<u>Carya illinoensis</u> pecan	TC	20-30	28	Prechill 60 days at 3-5°C.
<u>Carya ovata</u> shagbark hickory	TC	20-30	28	Prechill 60 days at 3-5 °C.
<u>Casuarina spp.</u> beefwood	C, TB	20-30	14	Light
<u>Cornus florida</u> flowering dogwood	C, TB P	20-30 18-22	28 10	Prechill 90 to 120 days at 3-5°C. Embryo excision
<u>Cornus stolonifera</u> red-osier dogwood	C, TB P	20-30 18-22	21 10	Prechill 90 days at 3-5°C. Embryo excision
<u>Crataegus mollis</u> downy hawthorn	C, TB	20-30	14	2 hrs. H ₂ SO ₄ , followed by 90 days prechill at 20°C. then 120 days at 3-5°C TZ may also be used.
<u>Eucalyptus deglupta</u>	C, TB	20-30	14	--
<u>Eucalyptus grandis</u>	C, TB	25	14	Light
<u>Grevillea robusta</u> silk-oak	C, TB	20-30	21	Light
<u>Libocedrus decurrens</u> incense-cedar	C, TB	20-30	28	Prechill 30 days at 3-5°C.
<u>Liriodendron tulipifera</u> yellow-poplar	C, TB	20-30	28	Prechill 60 days at 3-5°C.; or use TZ or embryo excision
<u>Magnolia grandiflora</u> southern magnolia	C, TB	20-30	42	Prechill 45 days at 3-5°C.; or use TZ
<u>Nyssa aquatica</u> water tupelo	TC	20-30	21	Prechill 30 days at 3-5°C.
<u>Nyssa sylvatica</u> var. <u>sylvatica</u> black tupelo	C, TB	20-30	28	Prechill 21 days; very few lots dormant

<u>Pinus caribaea</u> Caribbean pine	C, TB	20-30	21	--
<u>Pinus clausa</u> sand pine	TB	22	21	Sensitive to excess moisture
<u>Pinus serotina</u> pond pine	TB	22	21	--
<u>Platanus ceeci</u> <u>dentalis</u> American sycamore	TB	20-30	14	--
<u>Populus spp.</u> poplars	TB	20-30	14	Light
<u>Quercus spp.</u> (red or black oak group)	TC, TB	20-30	14	Cut 1/3 off cup scar end of acorn and remove pericarp
<u>Quercus alba</u> white oak	TC	20-30	28	--
<u>Quercus muehlenbergii</u> chinkapin oak	TC	20-30	28	--
<u>Quercus virginiana</u> live oak	TC	20-30	28	--
<u>Rhododendron spp.</u> rhododendron	C, TB	20-30	21	Light
<u>Vitis vulpina</u> riverbank grape	C, TB	20-30	28	Prechill 90 days at 3-5°C;; or use TZ

1/ All substrata symbols are the same as in the current rules, except TC= on top of creped cellulose paper without a blotter.

Present wording: Table 5 prescribes either "16 hours of light" or more than 8 hours for Pinus echinata, P. elliottii, P. palustris, P. virginiana and P. strobus.

Proposed wording: 8 hours of light is sufficient when light is used in germination of Pinus echinata, P. elliottii, P. palustris, P. virginiana and P. strobus.

3. Section 4.9 (page 31) Explanation of Tables 3, 4, and 5.

Addition:

- a. Substrata - addition to paragraph two. Symbols for substrata in column 2, Table 5, are the same as for Tables 3 and 4 except that (a) "p" includes (in addition to the above indicated materials) sponge rok, vermiculite, terralite, or a mixture of 50% sand and vermiculite, sand and perlite, etc.
 (b) "TC" = on top of creped cellulose paper without a blotter.

4. Section 4.11, Table 4. Methods of testing for laboratory germination and hard seed, Flower Seeds. (page 55) Additional species.

Kind of Seed	Substrata	Temperature °C	First count ^a days	Final count ^b days	Additional directions
<u>Anthemis tinctoria</u> , (kelwayi (Golden camomile)	P	15	-	14	Light; new crop seed may be sensitive to temperature above 15°C
<u>Anthemis sancti-johannis</u> (St. Johns camomile)	P	15	-	14	Light; new crop seed may be sensitive to temperature above 15°C
<u>Aquilegia alpina</u> (Alpine columbine)	P	20-30	6	16	Light; prechill 14-21 days at 3-5°C with KNO ₃ prior to testing
<u>Asclepias tuberosa</u> (Butterfly milkweed)	P	10-30	6	14	Light; prechill 21 days at 3-5°C prior to testing
<u>Baileya pleniradiata</u> (Desert baileya, woolly marigold)	P	20-30	-	14	Light; seed treatment may be necessary for <u>Rhizoctonia</u> infected seed.
Cacti-mixtures	P	20-30	7	18	Light; good moisture supply terminate some tests earlier
<u>Cardiospermum halicacebum</u> (Balloonvine, heartseed)	B	20-30	10	28°	Clipping seed coat will eliminate hard seed
<u>Cereus giganteus</u> (Saguaro cactus)	P	20-30	-	10	Light; good supply moisture

Kind of Seed	Sub- strata	Temper- ature °C	First count ^a days	Final count ^b days	Additional directions
<u>Dictamus albus</u> (Gasplant dittany)	P	20-30	10	21	Light; prechill 45 days at 3-5°C prior to testing
<u>Echinops ritro</u> (Small globethistle)	TB	20-30	8	21	Light; good supply moisture
<u>Episcia spp.</u> (Flame-violets)	P	20	-	21	Continuous light
<u>Erigeron speciosus</u> (Oregon fleabane)	P	15	6	16	Light
<u>Euphorbia heterophylla</u> (Painted euphorbia)	TB	20-30	6	16	Light
<u>Ferocactus wislizeni</u> (Barrell cactus)	P	20-30	-	10	Light; good suppl moisture
<u>Fushsia spp.</u> (Fuchsia)	P	15	16	28	Light; 8 hours or more
<u>Inula grandiflora</u> (Sunflower inula)	P	20-30	6	14	Light
<u>Kalanchoe blossfeldiana</u> (Kalanchoe)	P	20	-	16	Continuous light
<u>Lavatera trimestris</u> (Herb treemallow)	B	20	7	21 ^c	Hard seed present
<u>Lychnis viscaria</u> (Clammy campion)	P	20-30	-	14	Light
<u>Martynia proboscidea</u> (Martynia, Devils claws) Unicorn plant	P	20	-	10 ^d	Light, excise embryos and place in closed dish
<u>Mentha piperita</u> (Peppermint)	P	20-30	7	16	Light
<u>Mesembryanthemum criniflorum</u> (Ice plant livingstone daisy)	P	15	6	16	New crop seed may require 10°C and KNO ₃
<u>Mimulus tigrinus</u> (Tiger monkeyflower)	P	15	-	14	Light

Kind of Seed	Sub-strata	Temperature °C	First count ^a days	Final count ^b days	Additional directions
<u>Pyrethrum ptarmicaeflorum</u> (Canary Islands chrysanthemum)	P	15	-	12	Light; seed treatment may be necessary with fungus infection
<u>Saintpaulia spp.</u> (African violet)	P	20	18	28	Continuous light
<u>Sedum acre</u> (Goldmoss sedum)	P	15	-	14	Light; 8 hours or more
<u>Sempervivum spp.</u> (Hens and chickens)	P	20	-	14	Light; 8 hours or more-
<u>Thymus serpyllum</u> (Mother-of-thyme)	P	15	-	14	Light
<u>Veronica latifolia</u> (Hungarian speedwell)	P	20-30	6	16	Light
<u>Veronica spicata</u> (Spike speedwell)	P	20-30	6	16	Light

AOSA VIGOR TESTING COMMITTEE

L. W. Woodstock

1. Before the annual AOSA/SCST meetings.

For several years the AOSA Vigor Testing Committee has considered development of a Vigor Testing Handbook. Although this project was endorsed and actively urged by three AOSA Presidents (George Spain, Ed Hardin, and Thomas Cuddy) and approved by the AOSA Executive Board, progress was slow, due in part to uncertainty amongst Committee members as to the scope and format of a Vigor Testing Handbook and even whether such a handbook was desirable at the present time.

The situation has changed markedly during the past year. A number of state laboratories including Alabama, Iowa, Mississippi, North Carolina, and Oregon, among others, have moved to offer one or more types of vigor evaluations. There is also a possibility that some states might move in the direction of using vigor tests for regulatory purposes. The Association of American Seed Control Officials (AASCO) passed the following resolution at their Biennial Conference in Madison, Wisconsin on September 27, 1973: