

Seed Technology

An International Journal Serving Seed Scientists and Technologists

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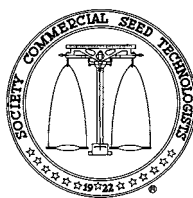


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Editor:

Riad Baalbaki

California Department of Food and Agriculture
Plant Pest Diagnostics Branch
3294 Meadowview Road
Sacramento, CA 95832-1448
USA

Assistant-Editor:

Susan Alvarez, RST
Ransom Seed Laboratory
P.O. Box 300
Carpinteria, CA 93014-0300
USA

Seed Technology

THIS JOURNAL is co-sponsored by the two predominant organizations in North America with a direct interest in seed technology: the Association of Official Seed Analysts and the Society of Commercial Seed Technologists.

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AIMS AND SCOPE – *Seed Technology* is an international journal containing scientific and technological papers in all areas of Seed Science and Technology. The emphasis is on applied and basic research in seed physiology, pathology and biology that may relate to seed development, maturation, germination, dormancy and deterioration. Studies on seed production, sampling, testing, conditioning, distribution and storage are also included. Short communications from seed analysts and technologists are encouraged and will be published as Seed Tech Notes. These notes include new techniques, standardization of laboratory tests and documentation of anatomical and pathological observations of seed and seedling development. The journal also includes timely review articles of seed technology that may relate directly to the seed industry.

TYPES OF PAPERS – Original research papers, review articles and Seed Tech Notes are reviewed for publication. All manuscripts should be submitted online. Potential authors should note that there are no page charges and reprints can be ordered directly from the printer at a minimal fee. Refer to the last pages of this volume (Instructions to Authors) for detailed instructions regarding manuscript submissions.

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Branched (*Orobancha ramosa* L.) and Egyptian (*Orobancha aegyptiaca* Pers.) broomrapes, like many other phanerogamic parasites, challenge our concepts of seed vigor. Parasitic broomrape seeds develop by absorbing host plant synthates shortly after germination. Seed vigor attributes such as emergence speed and stress tolerance are therefore of minor relevance for such species. The “vigor” of Egyptian (left) and branched (right) broomrape seeds is better understood as a function of small size, dispersal potential and soil longevity, seed-based attributes commonly used to describe highly invasive and persistent weed populations. Scale line = 0.5 mm. Photo credit: Vivian Le and Riad Baalbaki, California Department of Food and Agriculture.

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Seed Technology

Instructions to Authors

Seed Technology is an international journal that publishes original papers, review articles, technical notes and symposia in all areas of seed science and technology. This includes information from applied and basic seed research in physiology, pathology and biology for all plant species. The journal relates to individuals interested in seed production, sampling, testing, conditioning, distribution and storage of agronomic, horticultural and forest seed crops. Papers are accepted on the understanding that they have not been published or submitted to any other scientific journal. The criteria for acceptance are originality, quality of research and interest to readership. Manuscripts are peer-reviewed by two or more anonymous reviewers, with final acceptance resting with the Editorial Board. The journal is published two times per year and is available as paper copies by contacting: SCST Business Office, 653 Constitution Ave. NE, Washington, D.C. 20002, USA (phone: 202-870-2412). Subscription information and order forms are available online at: <http://www.stjournal.org>.

Manuscripts must be clearly written using proper English. If English is not the primary language of the author, the manuscript should be reviewed by someone proficient in English prior to submission to the journal. Manuscripts should be submitted online; see “**Guidelines for Submission**” at the end of the instructions. Five types of submissions will be considered for publication:

- a. **Full-length manuscripts** should report new information to the subject area or expand on established knowledge to contribute additional information of value. Manuscripts undergo peer review to determine that adequate scientific methods were applied, that interpretations and conclusions are valid, and that all aspects of the study are adequately presented.
- b. **Seed Tech Notes** are appropriate for the reporting of seed laboratory or seed production research that may not justify a full paper, but provide important information of potential practical importance. This may include new techniques or developments, standardization of old techniques or anatomical, pathological or other documentation of seed or seedling development. The requirements for such notes are described below.
- c. **Technical Papers** presented orally or by poster at the annual meeting of the Association of Official Seed Analysts (AOSA) and Society of Commercial Seed Technologists (SCST) are invited, which cover topics of general interest to the seed biologist or technologist.
- d. **Symposia** or workshops presented to the AOSA/SCST membership may be recorded in the journal for future reference. Organizers should prearrange with the Editor to receive papers from the presenters of symposia and workshops within a specified timeframe for inclusion in a single journal issue.
- e. **Review articles** are welcomed by special prior arrangement with the Editor. Reviews should cover a summary of a seed biology or seed technology topic

or an evaluation of a seed science or technology related publication. The content of reviews should have a strong technical and/or scientific base.

INSTRUCTIONS FOR FULL LENGTH MANUSCRIPTS

Instructions for full length manuscripts should be carefully reviewed to ensure that the submitted manuscript complies with *Seed Technology* standards and requirements. **If these guidelines are not closely adhered to, papers will be returned to authors for revision or released from further consideration for the journal.**

Manuscripts should be arranged in the following order: **Title** (no separate title page), **Author(s)**, **Abstract**, **Text**, **Acknowledgments**, **References**, **Tables**, **Captions for Figures** (separate page) and **Figures**. Do not include a list of key-words. The title should be concise (10 to 12 words) but informative, containing key words which describe the subject matter for use in abstracting systems. The name of the author(s) should be placed below the title with an asterisk (*) after the name of the corresponding author.

The **abstract** should concisely summarize the entire scope of the paper including findings and conclusions without reference to text or figures. **All categories of manuscripts or papers submitted to the journal must have an abstract.** It should appear immediately below the title and authors and consist of not more than 250 typed words. **Authors may provide a translation of the abstract in one additional language, which will be printed in the journal following the primary abstract in English.** Availability of abstracts in alternate languages should be discussed with the Editor early in the submission process. Accuracy in regard to content and grammar of the second abstract is the responsibility of the corresponding author. Do not include a list of key words.

The **text** of the manuscript should normally have the subject matter grouped under the following major headings: **Introduction**, **Materials and Methods**, **Results**, **Discussion** (Results and Discussion may be combined), **Acknowledgments** (optional) and **References**. Main headings are centered on each page and capitalized in bold type. Secondary headings begin at the left margin (do not indent) with the first letter capitalized and the entire heading in bold print. Use of a previous issue of the journal as a guide to format is recommended.

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- AOSA. 2010. Rules for testing seeds, Vol. 1. Principles and procedures. Assoc. Offic. Seed Anal., Ithaca, NY.
- Bernard, R.L. and M.G. Weiss. 1973. Qualitative genetics. p. 117–154. *In Soybeans: improvement, production, and uses*. B.E. Caldwell, R.W. Howell, J.W. Judd and H.W. Johnson (eds.). 1st ed. Agron. Monogr. 16. ASA, CSSA, and SSSA, Madison, WI.
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McGee, D.C. 1992. Soybean diseases. Am. Phytopathol. Soc., St. Paul, MN.

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Address all inquiries **to the Editor or Assistant Editor:**

Riad Baalbaki, Editor
Senior Seed Botanist
California Department of Food and Agriculture
Plant Pest Diagnostics Branch
3294 Meadowview Road
Sacramento, CA 95832-1448
Phone: (916) 262-3292
Fax: (916) 262-1190

Susan Alvarez, Assistant Editor
Registered Seed Technologist
Laboratory Manager
Ransom Seed Laboratory
P.O. Box 300
Carpinteria, CA 93014-0300
Phone: (805) 684-3427
Fax: (805) 684-4157

INSTRUCTIONS FOR *SEED TECH NOTES*, TECHNICAL PAPERS AND SYMPOSIA OR WORKSHOPS

The format for *Seed Tech Notes*, technical papers and presentations from symposia or workshops is as for full length papers insofar as practical. The text headings may be the same as a full paper or may be arranged by **Abstract, Experimental Techniques, Results and Discussion, and References**, if that format is more suitable to the presentation of the material. The Experimental Techniques section will include a brief narrative of those elements normally included in the Introduction and Materials and Methods sections of full length papers. *Seed Tech Notes* and technical papers are usually much shorter and may present only preliminary research data compared to full length papers. These papers usually do not exceed four pages of printed text and a maximum of two figures, tables or photographs. Papers presented at committee meetings, symposia and workshops not containing cited references or other conventional journal paper elements may be considered for publication if these presentations

contain information of a practical nature or general interest in seed biology and technology.

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Manuscripts resulting from symposia on seed biology or technology topics will be considered for publication in a single volume of *Seed Technology* by prearrangement with the Editor. Manuscripts may originate from symposia sponsored by the Association of Official Seed Analysts or the Society of Commercial Seed Technologists or from appropriate seed symposia sponsored by other organizations. Symposia organizers desiring to publish a set of manuscripts in *Seed Technology* must solicit the Editor with the following information: (i) title, date and location of the symposium, (ii) the organization affiliated with the symposium, (iii) names, addresses, e-mail and telephone numbers of symposium organizers and (iv) titles and abstracts for each paper to be considered for publication. Symposia papers are subject to the usual format described above for *Seed Technology* and will be reviewed by the editorial board prior to acceptance for publication.

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