

| | |
|--------------------------------------|---|
| Editorial – Wayne Guerke..... | 3 |
|--------------------------------------|---|

FINAL SEED RESEARCH REPORT:**Project funded by American Seed Research Foundation**

| | |
|--|----------|
| The Ohio State University Seed Vigor Imaging System (SVIS) for Soybean and Corn Seedlings/Andrew F. Hoffmaster, Lijie Xu, Kikuo Fujimura, Miller B. McDonald, Jr., Mark A. Bennett and Andrew F. Evans..... | 7 |
|--|----------|

REFEREED PAPERS

| | |
|--|-----------|
| Effects of Crossing Periods on Seed Maturity and Quality in a Chinese Commercial Bt Hybrid Cotton Cultivar / Hezhong Dong, Wei Tang, Dongmei Zhang, Xiaojie Zhang and Weijiang Li..... | 27 |
| Retrieval and Identification of Weed Seeds from Landscape Soils/ Susana H.A.C. Mogensen, Phil S. Allen and Larry S. Jeffery | 37 |
| Observations on Seed Quality of <i>Schinopsis balansae</i> Engl., a Tree Species Endemic to South America / C. Alzugaray, N. J. Carnevale, A. R. Salinas and R. Pioli..... | 49 |
| Gibberellin plus Norflurazon Enhance the Germination of a Dark Green Tomato Genotype/G. Ramirez-Rosales, M. A. Bennett, M. B. McDonald and D. Francis | 59 |
| Total Antioxidant Capacity of Fruit and Seeds from Normal and Enhanced Lycopene (<i>Lycopersicon esculentum</i> Mill.) Tomato Genotypes / G. Ramirez-Rosales, M. Bennett, M. B. McDonald, D. Francis and S. Contreas..... | 66 |
| Pattern of Fruit and Seed Development in Vegetable Cowpea [<i>Vigna unguiculata</i> (L.) Walp. ssp. <i>sesquipedalis</i> (L.) Verdc.] / K. Krishnakumary, V. S. Devadas, C. Mini and T. R. Gopalakrishnan..... | 76 |
| Effect of Harvest Maturity and Drying Method on Okra Seed Quality / I. Demir and S. Ermis..... | 81 |
| Methods for Extraction and Amplification of DNA from Soybean Seed / Melvin D. Bolton, Berlin D. Nelson, Robert D. Sparks and Adi Santoso..... | 89 |

SEED TECH NOTES

| | |
|--|------------|
| Detection of <i>Phomopsis longicolla</i> T. W. Hobbs and its Pathogenicity on <i>Glycine max.</i> (L.) Merr. and Weed Hosts / Alemu Mengistu and Krishna N. Reddy..... | 97 |
| A Modified Chromosome Squash Technique to Determine Mitotic Activity in Primed Mericarps / Michael W. Olszewski, Wallace G. Pill and Thompson D. Pizzolato..... | 101 |
| Phenotypic Traits of Genetic Twins in Coconut Palm (<i>Cocos nucifera</i> L.) and Their Utility in Seed Production / V. Arunachalam..... | 104 |
| Effect of Accelerated Aging on Germination of Oil Palm (<i>Elaeis guineensis</i> Jacq. var. <i>dura</i> Becc.) / P. Murugesan, R. K. Mathur, R.S.N. Pillai and M. Kochu Babu..... | 108 |
| SEED VIGOR Symposium & Workshop | |
| Evaluating Rice (<i>Oryza sativa</i> L.) Seed Vigor / Amanda L. Patin and Tim J. Gutormson..... | 115 |

| | |
|--|------------|
| Evaluating Peanut (<i>Arachis hypogaea</i> L.) Seed Vigor / Wayne R. Guerke..... | 121 |
| Cool Germination Test: Principles and Applications in Cotton / Bryan R. Savoy..... | 127 |
| Cottonseed Vigor Tests (excluding the Cool Germination Test) / Paul G. Johnson..... | 130 |
| Accelerated Aging Test: Principles and Procedures / Dennis M. TeKrony..... | 135 |
| Evaluating Sorghum Seed Vigor / J. S. Burris..... | 147 |

RESEARCH PAPERS PRESENTED AT 2004 AOSA/SCST MEETINGS:

| | |
|--|------------|
| Using SSR as an Alternative to Isozyme for Corn Hybrid Purity Testing Huabang Chen, Pam Hogue, Karen Miller, Alan Galbreth and Rick Vierling..... | 157 |
| Germination and Stand Establishment of Polymer Coated Canola (<i>Brassica napus</i> L.) Seeds Subjected to Moisture Stress and Various Planting Depths and Soils / Udai R. Bishnoi and James White..... | 161 |