

## **REVIEW**

- Potential of *Leucaena leucocephala* and *Leucaena esculenta* Seeds in Human Nutrition: Composition, Techno-functional Properties, Toxicology and Pretreatment Technologies  
*Laura Victoria Aquino-González, Beatriz Noyola-Altamirano, Lilia Leticia Méndez-Lagunas, Juan Rodriguez-Ramirez, Sadoth Sandoval-Torres, Luis Gerardo Barriada Bernal* 1261

## **GENETICS AND BREEDING**

- Genetic Variability and G×E Interactions in a Diverse Set of Groundnut Accessions  
*K. Gangadhara, H.K. Gor* 1271
- Assessment of Genetic Variability and Traits Association in Pigeonpea [*Cajanus cajan* (L.) Millsp.] Germplasm  
*C. Vanniarajan, P. Magudeeswari, R. Gowthami, S.M. Indhu, K.R. Ramya, K. Monisha, M. Arumugam Pillai, Nidhi Verma, Jeshima Khan Yasin, Jayapradhachandran* 1280
- Breeding of Kidney Bean (*Phaseolus vulgaris* L.) Cultivar Keyun1 and Exploration of Nitrogen Application and Planting Density  
*GD. Yang, Z.Y. Hu, Z.Y. Hao, J.H. Li, B.S. Sun, X.X. Meng, Q. Wang* 1288
- Estimation of Outcrossing Rate of Faba Bean under Natural Moroccan Conditions  
*Oumaima Chetto, Zain El Abidine Fatemi, Abdelghani Naboussi* 1295
- Genetic Divergence Studies among Indigenous Accessions of *Cassia auriculata* (L.) Roxb., through Screening and Utilization for Chambal Ravine Rehabilitation  
*S. Kala, I. Rashmi, H.R. Meena, Shakir Ali, S. Reeja, S. Vennila, Ambika Rejendran* 1302
- Genetic Variability and Diversity for Yield and Yield Attributing Traits in M<sub>3</sub> and M<sub>4</sub> Generations of Butter Bean (*Phaseolus lunatus* L.)  
*G. Ashokkumar, S.T. Bini Sundar, B.K. Savitha, D. Rameshkumar, P. Balasubramanian, T. Sampathkumar, D. Sathiyaraj* 1308
- Genetic Analysis of Seed Traits in Pre-breeding Lines of Blackgram [*Vigna mungo* (L.) Hepper]  
*S. Manju Devi, P. Jayamani, M. Kumar* 1314

## **BIOTECHNOLOGY**

- Optimization of Genetic Transformation on Phytochrome A by Directly Differentiated Buds in Alfalfa  
*Pengfei Shi, Yanping Gao, Ying Lei, Wennan Fan, Yixin Yang, Yaqi Shi* 1319
- Development of CAPS Marker Linked to H<sub>2</sub> Locus of Fusarium Wilt Resistance in Chickpea  
*Sunil Subramanya, Chandrakanth D. Soregaon, Dalpat Lal, Ramapura Laxmipathi Ravikumar* 1326

## **AGRONOMY**

- Effects of Nanofertilizer Applications at Different Growth Stages of Sweet Corn (*Zea mays* var. *saccharata*) on Biochemical Stress Factors  
*Gözde Hafize Yıldırım, Ebru Bati Ay* 1332

- Effects of Drought Stress on Seed Germination and Seedling Growth of Alfalfa with Different Seed Coat Colors  
*S. Gao, Y.C. Fan, M.Y. Yu, J.W. Zhang, J.F. Wang* 1339

- Productivity and Economics of Pigeonpea Genotypes as Influenced by Planting Geometry, Growth Retardant

- Ganajaxi Math, M.S. Venkatesh, Gurupada Balol, S.B. Revanappa* 1345

- Organic Cultivation of Summer Groundnut using Cow-based Bio-enhancers and Botanicals  
*R.K. Mathukia, S.K. Chhodavadia, L.C. Vekaria, M.S. Vasava* 1351

- Cluster Frontline Demonstration: An Effective Technology Dissemination Approach for Enhancing Productivity and Profitability of Black Gram (*Vigna mungo*)  
*Upesh Kumar, G.A. Patel, R.P. Chudhari, S.S. Darji, R.S. Raghav* 1356

- Carryover Effect of Biochar and Cow Dung Manure on the Productivity of Green Gram (*Vigna radiata* L.) in Typic haplustalf  
*B.R. Arunkumar, G.N. Thippeshappa* 1361

- Influence of Plant Growth Regulators on Growth, Yield and Yield Components in Garden Pea  
*Rajesh Choudhary, B.K. Singh, Ashok Choudhary, S.K. Jat, Anita Choudhary, R. Bajia* 1366

## **PLANT PROTECTION**

- Screening of Ricebean [*Vigna umbellata* (Thunb.) Ohwi and Ohashi] Cultivars against Pulse Beetle [*Callosobruchus chinensis* (L.)]  
*Khrieketou Kuotsu, Pankaj Neog, L. Imtinaro, Rumki H. Ch. Sangma* 1370

- Bacillus valezensis*: A New Plant Growth Promoting Rhizobacterium for Plant Growth Promotion and Inhibition of *Rhizoctonia bataticola* for the Management of Dry Root Rot of Chickpea  
*Gururaj Sunkad, Meghana S. Patil, Ranjana Joshi* 1378

- Effect of Various Plant Powders on Pulse Beetle, *Callosobruchus maculatus* (F.) (Coleoptera: Bruchidae) and Seed Weight Loss in Stored Black Gram  
*K. Govindan, S. Geethanjali, S. Douressamy, G. Brundha* 1385

- Preliminary Studies on Bio-efficacy of Different Botanical Extracts against *Sclerotium rolfsii* (Sacc.) Causing Collar Rot of Chickpea (*Cicer arietinum* L.)  
*Karan Singh, C.B. Meena, Chirag Gautam, Meenu Kumari Meena* 1392

- Pathogenicity of Root Knot Nematode (*Meloidogyne incognita*) and its Effect on Yield of Cowpea [*Vigna unguiculata* (L.) Walp]  
*D. Thakur, P. Pradhan, J.P. Sahoo, R.P. Subudhi, R. Bastia, J. Pradhan, M.P. Das* 1399