

---

## Contents

<b>1 The Pigeonpea Genome: An Overview . . . . .</b>	<b>1</b>
Rajeev K. Varshney, Rachit K. Saxena and Scott A. Jackson	
<b>2 Key Plant and Grain Characteristics and Their Importance in Breeding and Adaptation of Pigeonpea Cultivars . . . . .</b>	<b>5</b>
K.B. Saxena, Rachit K. Saxena and Rajeev K. Varshney	
<b>3 Botanical Description of Pigeonpea [<i>Cajanus Cajan</i> (L.) Millsp.] . . . . .</b>	<b>17</b>
C.V. Sameer Kumar, S.J. Satheesh Naik, Nidhi Mohan, Rachit K. Saxena and Rajeev K. Varshney	
<b>4 Wide Crossing Technology for Pigeonpea Improvement . . . . .</b>	<b>31</b>
Nalini Mallikarjuna, Rachit K. Saxena, M. Byre Gowda and Rajeev K. Varshney	
<b>5 Modern Genomic Tools for Pigeonpea Improvement: Status and Prospects . . . . .</b>	<b>41</b>
Abhishek Bohra, Shalini Pareek, Rintu Jha, Rachit K. Saxena, Indra P. Singh, Gaurav Pandey, Raj K. Mishra, Farindra Singh, Mayank Kaashyap, Rohit Joshi and Rajeev K. Varshney	
<b>6 Molecular Mapping of Genes and QTLs in Pigeonpea . . . . .</b>	<b>55</b>
Reyazul Rouf Mir, Irshad Ahmad Rather, Mohd Ashraf Bhat, G.A. Parray and Rajeev K. Varshney	
<b>7 Germplasm Characterization and Trait Discovery . . . . .</b>	<b>65</b>
Christopher P. Krieg, Mulualet T. Kassa and Eric J.B. von Wettberg	
<b>8 Whole-Genome Sequencing of Pigeonpea: Requirement, Background History, Current Status and Future Prospects for Crop Improvement . . . . .</b>	<b>81</b>
Rachit K. Saxena and Rajeev K. Varshney	
<b>9 Sequencing Pigeonpea Genome . . . . .</b>	<b>93</b>
Vikas K. Singh, Rachit K. Saxena and Rajeev K. Varshney	
<b>10 Future Prospects . . . . .</b>	<b>99</b>
Rajeev K. Varshney, Rachit K. Saxena and Scott A. Jackson	

The Pigeonpea Genome

Varshney, R.K.; Saxena, R.K.; Jackson, S.A. (Eds.)

2017, XVII, 104 p. 17 illus. in color., Hardcover

ISBN: 978-3-319-63795-2