Preface

Formal recognition of angiosperm embryology began in 1903 with Coulter and Chamberlain's book. General embryological works since then have not emphasized cultivated or otherwise economically important plants. This book is a general treatment of normal sexual reproduction in angiosperms, but it emphasizes examples from economic plants. Many references from the vast embryological literature are also cited in each chapter, which provides the reader entry into almost any subdiscipline or specialized topic of embryology.

The foreword to a 1984 multi-authored embryology book mentioned that the time for single-authored works in this discipline had passed. This is probably true for advanced treatises, but such works usually have the disadvantages of uneven treatments and styles of contributing authors, and the rich dishes of information they serve up often prove indigestible for nonprofessionals. Single authorship, in contrast, usually provides a uniform style and a reasonably consistent level of treatment. In this book the latter comes from my 20 years of teaching embryology, providing answers and advice to graduate student and faculty researchers, and research and publication (25 papers and book chapters) in embryology. These experiences convinced me of the need for an angiosperm embryology book that emphasizes economic plants.

The many borrowed illustrations that enrich the text are acknowledged in each caption, with sources given in each chapter's literature citations. I thank the many individuals, journals, professional societies, and publishers for their generous permission to reproduce. I thank my illustrator, Anna Gardner, for expertly copying, arranging (sometimes creatively) and labeling the figures, and for turning my original sketches into finished drawings. I also thank the Department of Botany (now Ecology, Evolution and Organismal Biology) for many services rendered over the several years required for this project, and I acknowledge the superb botanical holdings of the Iowa State University Library, without which the book might never have been completed. Dr. H.T. Horner, my longtime friend and colleague, has been a co-investigator in embryology projects, and he and his students and co-workers have contributed numerous illustrations for the book as well as critical insights and ideas—thanks, Jack.

Patricia Brady Lersten ("Pat") has been an exceptionally patient (except when applying needed prodding) and encouraging helpmate during the marathon gestation period required to give birth to this book. She deserves my love and part of any royalties.

Nels R. Lersten, Iowa State University,
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