Targeted at both beginners and experienced users, this handy reference explains various applications and benefits of flow cytometry (FCM) in plant sciences. Following a general introduction and authentic account of the development of flow cytometry, this book goes on to discuss the applications in plant genetics, genomics, physiology, pathology and breeding. It describes the use of FCM in plant biosystematics and population biology as well as the analysis of phytoplankton. Whenever appropriate, the methodology is explained and potential sources of errors are highlighted, while the first database on plant DNA flow cytometry (FLOWER) is also introduced.

With its broad scope encompassing environmental, cellular and subcellular levels, this first comprehensive work on the topic fills a real gap in the literature by providing first-hand practical hints for plant scientists.

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