

Seed Orchards Genetics

- Proposed Editor:** Yousry A. El-Kassaby.
- Purpose:** The purpose of the book is to provide a state-of-the-art seed orchards knowledge pertaining to genetics. Unlike the Faulkner's 1975 book which dealt with a wide array of topics, seed orchards have advanced immensely and most of the recent focus is dedicated to genetics. So, without exception, all the proposed chapters should be genetically oriented and present a review of the topic rather than the author's work alone.
- Review process:** All chapters will go through rigorous review. Unless external help is needed, the review will be done internally (i.e., among the book's authors group).
- Format:** Follow the Canadian Journal of Forest Research manuscript format.
- Participants:** It is intended to produce a global review, thus special attention will be given to authors' representation.
- Authors:** Lead author is responsible for communication with the editor; however, it is paramount that "close to perfect" communication should be established among each chapter's co-authors. Communications across chapters is also encouraged to avoid redundancy. The inclusion of additional authors is encouraged, so true global perspective is achieved (the lead author will take the lead on this issue).
- Possible Publisher:** Korean Forest Research Institute (KFRI). Kyu-Suk Kang will lead this.
- Proposed chapters:**
- 1- The economics of seed orchards → Jack Woods (Canada) / Tom Byram (USA)
 - 2- Linkage between breeding and genetic gain deployment and generation turnover → Dag Lindgren (Sweden)
 - 3- Environment and genetics interplay → Tore Skrøppa and Oystein Johnsen (Norway)
 - 4- Seed orchards designs → Yousry El-Kassaby (Canada)
 - 5- Softwood seed orchards → Matti Haapanen (Finland)
 - 6- Hardwood seed orchards → Mohan Varghese (India) / Dario Grattapaglia (Brazil)
 - 7- Indoors/container seed orchards → Curt Almqvist (Sweden)
 - 8- Genetic manipulation of existing orchards (thinning and selective harvest) → Kyu-Suk Kang (Korea)
 - 9- Mathematical optimization (gain and diversity → Milan Lstiburek (Czech Republic)
 - 10- Pollination dynamics, inbreeding and gene flow → Jaroslav Burczyk (Poland)
 - 11- Reproductive phenology → Tomas Funda (Czech Republic)
 - 12- Fecundity variation → E. D. Kjaer and O. Hanson (Denmark)

- 13- Management for better genetics → Nebi Bilir (Turkey) / David Reid (Canada) / Finnvid Prescher (Sweden)
- 14- Seed biology of orchards seed → Dave Kolotelo (Canada)
- 15- Seed orchards and climate change → Michael Stoehr and Greg O'Neill (Canada)
- 16- Alternative high gain methods → Tom Blush (USA) / Yill Sung Park (Canada)