

# Chapter 1

# Authorship Pattern and Collaborative Measures in Seed Technology Research: A Scientometric Analysis

S. Thanuskodi

 <https://orcid.org/0000-0001-8471-5799>

Central University of Tamil Nadu, India

## ABSTRACT

*Seed technology is inarguably an area of study that is important for healthy and profitable agricultural practices. The findings of this study will be of immense help in assessing and promoting Seed technology research and it would encourage the seed technologists and research institutions to improve their performance and review their research policy. The study also shows that the double authorship pattern (two authored) was dominant in Seed technology research. It is closely followed by the three-authored pattern. The collaborative authorship pattern with 91.3% (15169) publications was dominant than the single authorship pattern with 8.7% (1438) publications only. The highest degree of collaboration was found in the years 2014, 2016 and 2017. Lamont, BB, affiliated to Curtin University, Perth from Australia became the highest productive author with 50 publications. Shewry, PR affiliated to Rothamsted Research, Harpenden from England is the top cited author receiving 3495 citations for 37 publications.*

DOI: 10.4018/979-8-3693-5807-8.ch001

## **1. INTRODUCTION**

A quality seed to farm is an essential in agriculture. The famous Tamil saying expressed the vitality of fertile seed “*A good seed gives one hundred bundles of rice*”. According to the Oxford Dictionary seed means “the small hard part produced by a plant, from which a new plant can grow”. Agriculture started over 10,000 years ago on the flood fields of the great rivers of North Africa and the mid-East with human discovery of the propagative function of seed.

Everything starts from a healthy seed in farming and crop production. From the beginning of crop farming till date, seeds have been important in the establishment, development, diversification, and improvement of crop production. The seeds are such an indispensable input of agriculture. All other inputs like fertilizer, irrigation, weed control, plant insecticides will be useless if the seed does not germinate. Seed holds the key to the success of our endeavours in increasing agricultural production. It has been discovered that the use of quality seed increased agriculture production by 10- 30%. Therefore, quality seed assumes an imperative role in reducing food deficit by increasing production. Good seeds are both the symbol and foundation of good agriculture and our life and health are also dependent on seeds and their products.

## **2. NEED FOR THE STUDY**

Agriculture is an important occupation ever since the evolution of humankind and is considered to be the backbone for any country’s socio-economic development. The challenges in agriculture sector have increased manifold due to climate change, soil erosion, biodiversity, lack of technology, finance, manpower, and so on. The rise of Covid -19 and following uncertainties have shown the world how people across the globe would suffer due to inevitable health emergencies and how unending lockdowns may render the population of a country confused in meeting their basic necessities of living. This testing time once again proved that along with the healthcare sector, it is the agriculture sector of a country that plays a pivotal role in efficiently supplying the food demands of people. A country should always resort to healthy and advanced crop production practices and have a well thought out agriculture policy taking care of each and every phase of crop production and their storage requirements.

Any research relating to agriculture helps to generate new technologies and increase agricultural productivity. Seed technology research helps to get high-quality seeds to ensure more productive and healthy agriculture and thereby contributing to the area of knowledge in terms of scholarly communication.

30 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/authorship-pattern-and-collaborative-measures-in-seed-technology-research/367943](http://www.igi-global.com/chapter/authorship-pattern-and-collaborative-measures-in-seed-technology-research/367943)

## Related Content

---

### Beyond Institutional Repositories

Laurent Romaryand Chris Armbruster (2010). *International Journal of Digital Library Systems* (pp. 44-61).

[www.irma-international.org/article/beyond-institutional-repositories/39036](http://www.irma-international.org/article/beyond-institutional-repositories/39036)

### Digital Libraries in Africa: Evolution, Status, and Challenges

Stella E. Igun (2012). *International Journal of Digital Library Systems* (pp. 13-17).

[www.irma-international.org/article/digital-libraries-africa/73645](http://www.irma-international.org/article/digital-libraries-africa/73645)

### Information Needs and Information Seeking Behavior of Physically Challenged Students and Faculty of the University of Delhi: A Study

Ramneek Singhand Amrit Kaur (2013). *Design, Development, and Management of Resources for Digital Library Services* (pp. 300-308).

[www.irma-international.org/chapter/information-needs-information-seeking-behavior/72465](http://www.irma-international.org/chapter/information-needs-information-seeking-behavior/72465)

### Significance of Web 0.0-4.0, Semantic Web, Cloud Computing and Drupal in Concomitant to Library/ Information/ Knowledge Centres Management

Arun Kumar Chakraborty, Sumita Deyand Gopa Dasgupta (2014). *International Journal of Digital Library Systems* (pp. 1-15).

[www.irma-international.org/article/significance-of-web-00-40-semantic-web-cloud-computing-and-drupal-in-concomitant-to-library-information-knowledge-centres-management/141371](http://www.irma-international.org/article/significance-of-web-00-40-semantic-web-cloud-computing-and-drupal-in-concomitant-to-library-information-knowledge-centres-management/141371)

### Digital Libraries and Scholarly Communication: A Perspective

S. C. Jindal (2010). *Developing Sustainable Digital Libraries: Socio-Technical Perspectives* (pp. 19-39).

[www.irma-international.org/chapter/digital-libraries-scholarly-communication/42735](http://www.irma-international.org/chapter/digital-libraries-scholarly-communication/42735)