

基于文献计量的国内外柿研究现状分析

孙 颖

(华中农业大学图书馆,武汉 430070)

摘 要:【目的】我国是柿的原产国,也是世界上柿树栽培面积最大和柿果产量最多的国家,但我国柿研究的国际地位尚不十分明确。该文通过文献计量学方法比较分析世界及我国柿科学和技术研究的现状及发展趋势。【方法】运用文献计量学方法,通过SCIE数据库对2002—2016年柿相关研究文献(论文和综述)进行数据统计与分析,从年度发文量、国家和地区、发文机构、作者、来源出版物、研究学科方向、ESI高被引论文等方面探讨世界柿的研究现状及发展态势。【结果】关于柿的研究性文献有1 141篇,发文量整体呈上升趋势,柿研究领域是多学科全面发展的;柿研究国际间合作正在加强;日本、中国、韩国的研究机构实力较强,其中日本在发文机构、作者等数量和质量指标方面均远超其他国家/地区。【结论】我国柿相关研究文献数量近年来发展迅速,在发文数量、机构、作者方面有上乘表现,但发文质量指标较低,其学术影响力有待提高。

关键词: 柿; SCIE; 文献计量学; 定量分析

中图分类号: S665.2

文献标志码: A

文章编号: 1009-9980(2017)06-0706-09

Current situation of persimmon science and technology in the world based on bibliometrics analysis

SUN Jie

(Library of Huazhong Agricultural University Hubei, Wuhan 430070, Hubei, China)

Abstract: 【Objective】China is the origin of persimmon (*Diospyros kaki* Thunb.), and the largest area of cultivation and amount of production of persimmon in the world. The situation of the research on persimmon of China is not clear. The object of this survey is to analyse the current situation and the future trend of the global science and technology of persimmon based on bibliometrics study. 【Methods】Based on the data from the ISI Web of Science databases Science Citation Index Expanded (SCIEXPANDED) in the period of 2002—2016, bibliometric methods were used to investigate the research situations of persimmon through retriving the amounts of articles and reviews for years, countries and territories, institutes, authors, sources of journals, research areas and highly cited papers in Essential Since Indicators (ESI), while the development trends were comprehensively analysed by the literature metrology method. 【Results】There were eight types and 1 216 total papers including 1 095 articles (22 proceeding papers), 46 reviews, 46 meeting abstracts, 14 editorial materials, 9 news items, 3 corrections and 3 letters. The number of research publications of articles and reviews were 1 141. The number of yearly published papers increased from 45 in 2002 to 115 in 2016. The average annual growth rate was 7.77% during 2002 to 2016. The 1 141 papers were published by 61 countries and territories, and among them, 1 072 (93.95%) papers were published by the top 10 countries and territories as Japan, China, Korea, Spain, America, Brazil, Turkey, Israel and Italy. Among the top 10 countries, 969 (84.93%) were published by the top 5 countries and territories. There were totally 967 institutes contributed to the 1 141 papers, among them, 335 papers (29.36%) were published by 11 institutes, and 64 papers were published by Huazhong Agricultural University.

收稿日期: 2017-01-12 接受日期: 2017-02-26

基金项目: 湖北省教育厅人文社会科学研究项目(16G059)

作者简介: 孙颖,女,副研究馆员,博士,主要从事文献信息情报研究。E-mail: sj19992003@163.com

There were totally 3 259 authors contributed to the 1 141 papers, among them, and there were 11 authors who produced more than 19 papers, 3 from Huazhong Agricultural University of China, 3 from Saga University of Japan, 2 from National Agriculture and Food Research Organization of Japan, 2 from Instituto Valenciano de Investigaciones Agrarias of Spain, 1 from Kyoto University of Japan Professor Luo Zhen-grong from Huazhong Agricultural University was ranked first for the number of publications. There were totally 424 source journals, the *Scientia Horticulturae* and the *Journal of the Japanese Society for Horticultural Science* were ranked the first and the second for the number of the publications, respectively (49 and 45 papers). Persimmon research was a multi-disciplinary and comprehensive area referred to 66 subjects, the top 3 research subjects were agronomy, Food Science and Technology and Chemistry with 178 papers. There were 7 ESI top papers including 6 highly cited papers and 1 hot paper. Results showed that Japan was the top country for persimmon research, followed by China and South Korea. 【Conclusion】The number literature for persimmon research in China has been developed rapidly in recent years, with the performance in the agencies, the authors and the highly cited papers, but the quality indexes are still low, so the academic influence of the literature should be improved in the future.

Key words: Persimmon; SCIE; Bibliometrics; Quantitative analysis

柿,拉丁学名 *Diospyros kaki* Thunb., 英文名 Persimmon。是柿科 (Ebenaceae) 柿属 (*Diospyros*) 植物中作为果树利用的代表种,具有很高的经济价值和医疗价值,主要分布在热带、亚热带和温带地区^[1-2]。我国是柿的原产国,种质资源丰富,柿树栽培历史悠久,栽培面积和产量居于世界第一位,为世界柿产业大国。但我国柿的研究起步较晚,近年来关于中国甜柿种质资源调查、收集、保存、遗传多样性检测、遗传稳定性鉴定及其起源、演化研究以及经济性状评价和应用^[3],完全雄株的分类学地位及其作为花粉供体和砧木的应用价值评价,以及含柿单宁的金属吸附剂制备和应用等方面的研究在国内外具有一定影响^[4]。在甜柿叶片矿质元素含量适宜值^[5]、柿属植物种质资源遗传多样性的 SRAP 分析^[6]等方面进行了研究。柿种质资源的收集和保存数量目前处于世界领先地位^[7]。2004年在韩国举办的第三届国际柿学术研讨会上,中国甜柿及其研究成果受到注目^[8]。2012年在中国召开的第五届国际柿学术研讨会,展示了我国悠久的栽培历史、丰富的遗传资源及其对世界柿产业和科学研究的贡献。张毅^[9]、贝蓓等^[10]曾以中国期刊全文数据库为数据来源,基于文献计量学对专业中文核心期刊公开发表的柿文献进行了计量分析,分析了国内相关柿研究的概况。SCIE 是美国科学情报研究所 (ISI) 开发的著名数据库,所收录的学科论文基本上代表了全球自然科学基础研究成果的前沿和最高水平。笔者运用文献计

量学方法对 2002—2016 年柿研究领域公开发表的 SCIE 收录论文进行统计与分析,从科研文献产出的角度揭示有关国内外柿研究领域研究论文的生产规律、分布情况和发展态势,以期为了解我国柿研究的国际地位提供科学依据。

1 数据来源与分析方法

采用的检索式 TS=*Diospyros kaki* or *D. kaki* Thunb or Persimmon。检索时间范围限定为 2002—2016 年,检索时间为 2016 年 12 月 2 日。通过检索显示 SCIE 库 15 a 关于柿研究的文献有 1 216 篇;涉及 8 种文献类型,其中研究论文 (article) 1 095 篇,包括会议论文 (proceedings paper) 22 篇;其他文献类型不到 10%,分别是 46 篇会议文摘 (meeting abstract)、46 篇综述 (review)、14 篇编辑资料 (editorial material)、9 篇新闻 (news item)、3 篇订正 (correction)、3 篇信函 (letter)。研究论文是科学研究成果的主要表现形式,反映学科的研究特征和发展趋势^[11]。笔者仅对 1 141 篇研究论文 (article、review) 进行系统的分析统计,采用 SCIE 检索工具,使用 WoS 平台中的分析功能,利用 Excel 软件在对所得检索结果的基础上进行数据合并、去重处理后进行统计分析。通过发文年代、国家/地区分布、机构、作者、刊物、研究方向及 ESI 高水平论文等变量多方位的统计与分析,揭示近年来相关柿研究论文的分布情况及发展态势。将数量指标 (发文量)、质量指标 (引用情况) 及 *H* 指数