

Review and Prospect of Research on “Red Sorghum” based on Web of Science

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Abstract

When searching “Red Sorghum” written by Mo Yan in Web of Science (WOS) database, there are 17 articles focused on “Red Sorghum” and 96 articles focused on “Mo Yan” from 1980 to 2020 by January 17, 2020. By using CiteSpace visualization analysis software, from annual word frequency, the author, institution, country, term, keywords and references etc., this paper made a visual analysis on the research on “Red Sorghum” within 40 years. The study found that 41 countries or institutions have made the research on “Red Sorghum”, which shows the great influence of “Red Sorghum”. The main researches are in People’s Republic of China and USA. Key words such as “magic realism”, “cross cultural”, “Goldblatt”, “imagery”, “happy time”, “figure of speech” and “Chinese” are hot issues in the main researches. The research topic changes from theoretical discussion to practical application, and presents the characteristics of diversification and interdisciplinary.

Keywords

Red Sorghum; Chinese Culture; Mo Yan; CiteSpace; Web of Science (WOS).

1. INTRODUCTION

Mo Yan won Nobel Prize in Literature on October 11th, 2012, because his works carry with “numerous features, such as rural stories, plot twists, Chinese local characteristics and magic realism,” (Moore, 1) and “hallucinatory realism that merges folk tales, history and the contemporary” (Li, 13), and his works have been “translated into more than 16 languages around the world” (Chu, 8) His works have been paid much more attention to, and Red Sorghum is one of them, for one thing is the success of Mo Yan himself; for the other is the success of the film Red Sorghum, which is adapted from Red Sorghum Clan. In 1988, the movie Red Sorghum won the Golden Bear Award at the 38th Berlin International Film Festival, the first Asian film to win this Award, and other 17 awards in Zimbabwe International Film Festival, Sydney Film Festival, Brussels International Film Festival, Montreal International Film Festival, and Hong Kong International Film Festival, etc. from 1988 to 1990. (Wikipedia, Red Sorghum Film)

This study intends to use CiteSpace, a new visual analysis software, to systematically sort out and analyze the relevant researches on “Red Sorghum” from 1980 to 2020. Through the analysis of the annual word frequency, main research scholars, main research institutions and knowledge map of hot key words of the theme keyword “Red Sorghum”, the development status of the research on “Red Sorghum” is expounded. By studying the time zone chart of “Red Sorghum”, this paper makes an intuitive analysis of the research development trend of “Red Sorghum”, and provides insight into the frontier issues of development.

2. DATA SOURCES AND ANALYSIS TOOLS

In this paper, Web of Science (WOS) was taken as the main data source, and the retrieval period was from 1980 to 2020. When searching in the database by the key words “Red Sorghum” in WOS, there are 865 articles in total, among which the sorghum plant is researched most; While searching in the database by the key words “Mo Yan” in WOS, there are 97 articles in total. However, when the author went through the articles related to “Mo Yan”, they fell into two parts for all the results: some were just the same results as searching by “Red Sorghum” and the others got involved in the writing style or the research on “Mo Yan” himself or his other works. Finally, 17 related articles were obtained on the basis of manual proofreading, the meeting minutes, meeting notices, award selection and other disturbing articles were removed, and then refine the fields in educational research, literature, humanities multidisciplinary, cultural studies, social sciences, interdisciplinary, language linguistics, Asian study, film, radio and television, telecommunications and linguistics. Export the results from Web of Science Core Collection and save the results as plain text in full article and full records so as to establish the database for this study.

The analysis tool used in this paper is CiteSpace, a visual bibliometric analysis software developed by Chaomei Chen and his team. This software can effectively help readers to understand the research field they are engaged in. It can not only show the overall situation of a research field, but also highlight some important articles in the development process of the field (Yue Chen, Chaomei Chen 2014:6). At present, CiteSpace, as a new tool of scientometrics, has been widely used in various fields to analyze the history of development, research hot issues and development frontiers of different disciplines. In this paper, the software version 5.6.R2 is used to map the scientific knowledge of the research related to “Red Sorghum” in the past four decades, and the development status and development frontier of this field are analyzed through intuitive and vivid charts.

3. KNOWLEDGE MAP ANALYSIS BASED ON CITESPACE

This paper made the analysis based on the 17 most relevant articles. After searching the keyword “Red Sorghum”, the author exported the results from Web of Science Core Collection and saved the results as plain text in full article and full records so as to establish the database for this study.

After importing the data into CiteSpace information visualization software, the author can make annual word frequency chart, knowledge maps of the author, research institutions, terms and keywords co-occurrence and time zone map, and then to analyze the relevant development history in different perspectives in the past 20 years in the research current situation and the research frontier of “Red Sorghum”.

3.1. Analysis of Annual Word Frequency Distribution

The annual word frequency distribution can directly reflect the development of a certain research field. By searching for the keyword “Red Sorghum” in WOS database, 17 literature search results can be obtained. Figure 1 shows the annual distribution of relevant researches on the keyword “Red Sorghum” in WOS after refining to the most relevant to Mo Yan’s novel. The timeline in Picture 1 is from 2019 to 1989 from left to right. It is clearly to show that the research results come to the highest in 2019.

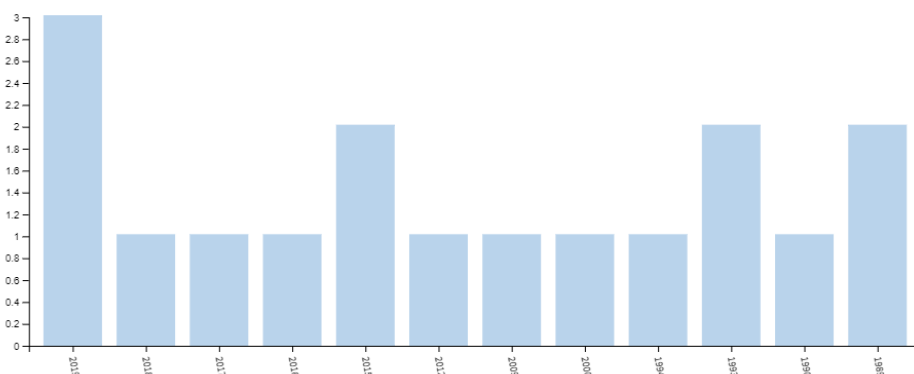
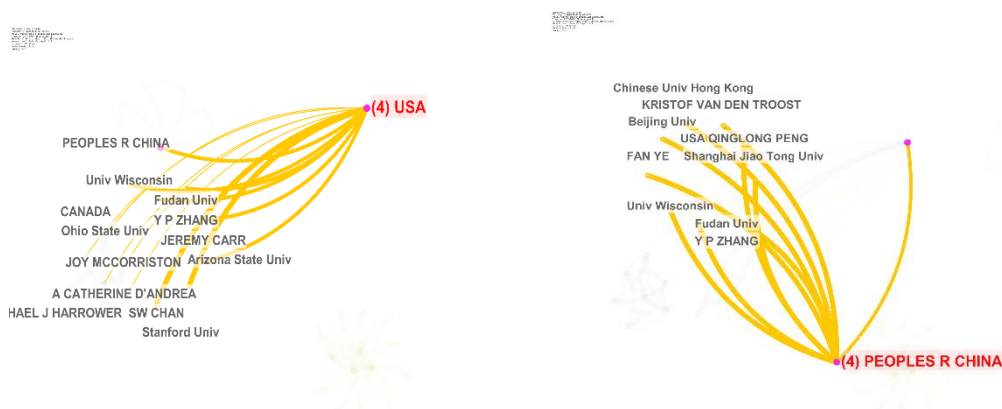


Figure 1. Annual Distribution of Relevant Researches on “Red Sorghum” in WOS

3.2. Analysis of Collaborative Network of Literature Authors

By studying the literature authors in the keyword of “Red Sorghum”, and understanding their publication volume and cooperation, it will be helpful to understand the development status and trend of scholars’ research on “Red Sorghum”. The author makes author co-occurrence knowledge map of “Red Sorghum” by using “Red Sorghum” as the theme and the author as Node types in CiteSpace to study (Figure 2). The nodes are scattered, with only a few connections between nodes, and the entire map network is scattered. The connection between nodes reflects the degree of close cooperation among authors. It can be seen from the figure that the authors in this research field have less cooperation and most of them are independent authors.



(1)Details illustrated by Node USA

(2) Details illustrated by Node PRC.

Figure 2. The author co-occurrence knowledge map of “Red Sorghum”

3.3. Analysis of Cooperation Network of Literature Institutions

Make an institute co-occurrence knowledge map by using the research institution of “Red Sorghum” as node type (Table 1). In table 1, the nodes represent the issuing institutions, the size of the nodes reflects the number of the issuing institutions, and the connection between the nodes reflects the close cooperation between the institutions. Based on this, Table 1 shows the research institutions and countries on “Red Sorghum”. By January 2020, 41 institutions had taken part in the study on “Red Sorghum”, among which People’s republic of China and the USA accounted for the most, with the number of publications being 4 both. The Year column in the table indicates the time when the institution first published articles. The beginning year of research went back to 2015 and 2000 respectively. The centrality are 0.26 and 0.36 respectively.

Table 1. Institute co-occurrence knowledge map of “Red Sorghum” as node type

Count	Centrality	Institutions/Country	Year
4	0.26	PEOPLES R CHINA	2015
4	0.36	USA	2000
1	0	TAIWAN	2019
1	0	Arizona State Univ	2019
1	0	JEREMY CARR	2019
1	0	Chang Jung Christian Univ	2019
1	0	Y P ZHANG	2019
1	0	CHEN MENGLIN	2019
1	0	Fudan Univ	2019
1	0	Univ Wisconsin	2019
1	0.04	ALEMSEGED BELDADOS	2018
1	0	DORIAN Q FULLER	2018
1	0	MICHAEL BRASS	2018
1	0	ENGLAND	2018
1	0	Univ Naples LOrientale	2018
1	0	FRANK WINCHELL	2018
1	0.01	CHARLENE MURPHY	2018
1	0	ITALY	2018
1	0	ETHIOPIA	2018
1	0	VALENTINA PERNA	2018
1	0.04	ANDREA MANZO	2018
1	0	CHRIS STEVENS	2018
1	0.04	Addis Ababa Univ	2018
1	0	UCL	2018
1	0	QINGLONG PENG	2017
1	0	Shanghai Jiao Tong Univ	2017
1	0	Chinese Univ Hong Kong	2016
1	0	KRISTOF VAN DEN TROOST	2016
1	0	Beijing Univ	2015
1	0	FAN YE	2015
1	0	PERRY LINK	2012
1	0.02	CANADA	2010
1	0	Univ Calif Los Angeles	2010
1	0	Simon Fraser Univ	2010
1	0.02	MICHAEL J HARROWER	2010
1	0.01	Ohio State Univ	2010
1	0.02	A CATHERINE D'ANDREA	2010
1	0.02	JOY MCCORRISTON	2010
1	0	[ANONYMOUS]	2009
1	0	Stanford Univ	2000
1	0	SW CHAN	2000

The main reasons for becoming the leading countries for PRC and the USA are (1) China as the motherland of the novel, there should be lots of scholars focusing on their own works; (2) the USA as the leading power in academic, lots of scholars are quite active and they have quite sharp eyes to sense the hot issues. When the author made a research in CNKI (China National Knowledge Infrastructure), there were 2062 results by searching the keyword “Red Sorghum”, which can be shown the popularity of this novel and the great influence of the novel in its

motherland. There were 19 institutions that first published this article before 2018. From 2018 to 2019, 22 institutions made the related publications which accounted for more than half of the research results only within two years. It is quite clear to see that the research on “Red Sorghum” is on the rise and it has drawn lots of attention recently.

3.4. Analysis on Keywords Clustering Knowledge of “Red Sorghum”

Keywords are highly generalized and refined contents of articles, so high-frequency keywords are often used to analyze research hot issues in a certain discipline (Feng Wang, Wen Chen 2017:85). It is helpful to determine the research hot issues and topics in this field by studying the keyword clustering knowledge map of “Red Sorghum” (Figure 3), the analysis of the keyword nodes, the co-occurrence relationship between nodes and the word frequency of key words in the knowledge map of clustering. In Figure 3, each node represents a keyword, and the size of the node reflects the frequency of the keyword. The connection between nodes is the co-occurrence relationship between the two, the thickness of the connection reflects the strength of the connection, and the color depth of the connection corresponds to the time zone where the first co-occurrence of the two keywords occurs. The lighter the color, the more recent the boom period is. On the contrary, the further away. Intermediary centrality is an indicator of the importance of degree nodes in the network, which is used in CiteSpace to find and measure the importance of literature (Jie Li, 2016:5). The greater the value of the intermediary centrality of keywords, the closer the relation between the connected keywords and the more information exchange. The information of all high school heart nodes in figure 3 was extracted and integrated, as shown in Table 2.

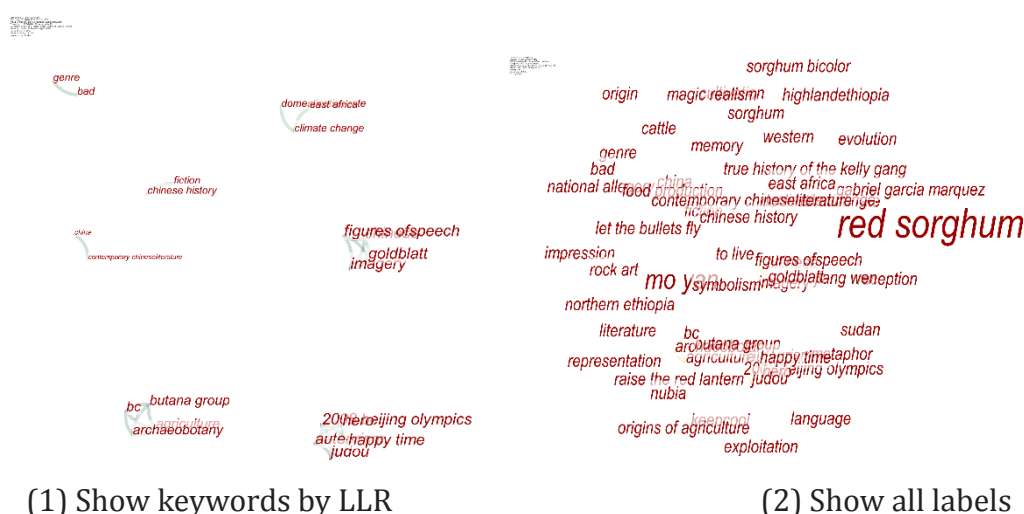


Figure 3. The keyword clustering knowledge map of “Red Sorghum”

The keyword clustering knowledge map of “Red Sorghum” from 1980 to 2020 can be obtained by running CiteSpace 5.6.R2 software to process the collected data. As can be seen from Figure 3, lots of keywords can be seen, such as “Red Sorghum”, “Mo Yan”, “figures of speech”, “magic realism”, “contemporary Chinese literature”, “Chinese history”, “western” and “Goldblatt” etc.. There are various connections among the nodes, and the entire network map is not interlaced and complicated so much, quite scattered, which indicates that there is a low degree of correlation between various research topics related to “Red Sorghum” (Figure 3 (1)). But by showing all the labels, by each cluster, there are several articles around each cluster, which can be seen in Figure 3 (2), different keywords overlapped together to make the node striking. In the figure, the node “Red Sorghum” and “Mo Yan” are the most striking ones, and the color of

the node turns from deep to light from inside to outside, with various gradations of dark and light, indicating that this keyword has the highest occurrence frequency and a long development period, and is the main keyword in this field. The rest of the larger node, i.e., more focus, high hot key words include “figure of speech”, “Goldblatt”, “imagery”, “hero”, “happy time” and so on, these high frequency keywords, to a certain extent, reflects the Red Sorghum research hot issues in the field of study in the recent years.

Table 2. High Centrality Node Information

Frequency	Centrality	Keyword
4	0	red sorghum
2	0	mo yan
1	0	goldblatt
1	0	chinese
1	0	imagery
1	0	judou
1	0	hero
1	0	cross-culture
1	0	auteurism
1	0	east Africa
1	0	bad
1	0	Chinese history
1	0	fiction
1	0	Chinese cinema
1	0	contemporary chinese literature
1	0	china
1	0	representation
1	0	magic realism

First of all, as shown in table 2, from 1980 to 2020, the keywords “Red Sorghum” and “Mo yan” are the main keywords, but the research field has involved in “Chinese cinema” “auteurism”, which means the great influence of the movie of “Red Sorghum”. When analyzing the keywords, it is quite easy to see the direction of these researches. In 1987, the movie Red Sorghum was directed by Yimou Zhang, a famous director in China and all over the world. The movie won 18 awards in different international film festivals from 1988 to 1990, (IMDb, Red Sorghum Film) which led a trend to explore local Chinese life for the audience and scholars all over the world.

Then, we can find the keywords such as “Goldblatt” and “cross-culture”. Howard Goldblatt is prolific and influential (Post, 2014), his translation of “Red Sorghum” greatly helps the spread of the original Chinese novel. “Although it has 16 versions among western countries, the English version receives the most popularity” (Ding & Wu, 21-25) “he did produce something that can be readily accepted by American readers” (Lingenfelter, 3) Mo Yan (2000) himself believes that it is Howard Goldblatt’s translation that paves the way for the tremendous success of his works. When searching the articles in CNKI, 169 articles are obtained focusing on the research on Goldblatt’s translation of Red Sorghum. Translation is such an important process to make the

novel known to the world. During the translation process, it is really also a process of cross culture communication.

At the same time, we can also see people's interest in studying the novel itself, such as the keywords "imagery", "representation" and "magic realism". These are the ways to analyze a novel from literature point of view. It is featured by "the unique language style, anti-tradition narrative pattern, magic realism and sophisticated plots. Due to these distinct features, "it has caused a great sensation" not only in Chinese literary circle but also in the world. (Yu Hang, 2018)

At last, a group of keywords together can show people's interest in studying Chinese literature, such as "contemporary Chinese literature", "fiction", "Chinese history" and "China". Inge (2000) speaks highly of the writing style of Red Sorghum, in which the chronological order is not followed while the plots move back and forth to activate readers' reading activities. The above high praise of Red Sorghum indeed proves its literary value. Davis-Undiano (2013) once writes in his article that "for a Western reader, Red Sorghum is a startling and powerful story that runs counter to many Western expectations of what a great Chinese novel could be". Chinese literary works include fiction, philosophical and religious works, poetry, and scientific writings. Chinese literature is an important part in the world literature, with its unique features and the setting back in China, it is a nice way to know much better about China. With "One belt one road" strategy, it is the high time that people could know much about the history, culture, and people in China.

3.5. Analysis on the Development Trend of the Research on "Red Sorghum"

The knowledge map of co-occurrence of keywords of "Red Sorghum" is presented in the form of time zone chart (Figure 4) when setting the Node Types as preferences and sources. As is shown in Figure 4, it reflects the change of the research on "Red Sorghum" research topics from 1980 to 2020 from left to right. The color changes from depth to lightness in the figure indicate the changes in the research field of "Red Sorghum" in chronological order, revealing the development trend characteristics of this field.

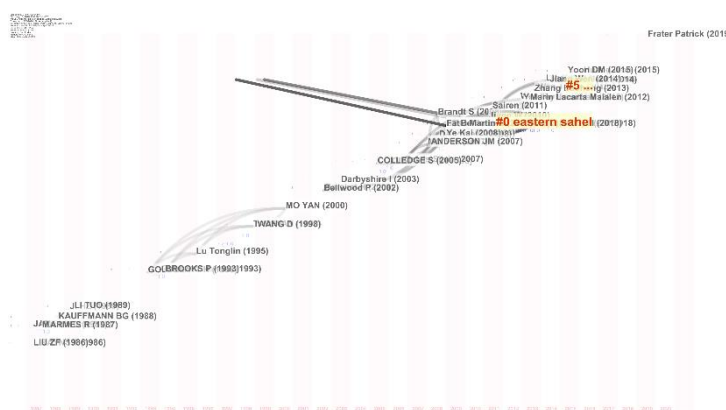


Figure 4. Time Zone Chart of the Research on "Red Sorghum"

From the time zone chart, we can see the development trend of the research on "Red Sorghum" from 1980 to 2020. In this chart, the first article was published in 1986, there are 4 articles from the year 1986 to 1989. Then, there goes a blank timeline during 4 years. Till 1993, the research began to occur continuously. The main reason for this is that the English version of Red Sorghum translated by Howard Goldblatt was published in 1993, which led a trend to draw scholars' attention to make the research on Red Sorghum, especially for the people abroad. Red Sorghum is originally written in Chinese, when it was translated into English, it meant it was on the

process to go globally, and it is quite normal to understand that the research on it went universally. Before 2002, the statistical publication volume was quite small. Since 2002, the research began to appear year by year steadily. Scholars from different institutions and countries began to, and this change shows that the research on Red Sorghum has come to the stage and drawn the attention of the public. Mo Yan's works have been translated into many languages, gaining more attention from foreign researchers (Zhiqin Jiang, 2006).

We can also see the links between 2010 to 2015 in Figure 4 are quite complex. since Mo Yan won the Noble Prize in 2012, the researches on Red Sorghum came to the stage largely when setting the Node Type as source and preferences, which means that there were lots of related researches in different areas, not only focusing on Red Sorghum but also in other fields, such as cross culture, sociological studies, translation, linguistics, etc.. The English version is highly acclaimed and reaps astonishing success in America. We have already gotten the analysis of Red Sorghum based on corpus-assisted studies. One study has been done to examine the translation and circulation of Mo Yan's Red Sorghum from the sociological angle. (Baorong Wang, 2014) From the chart we can know that the research goes universally and multidisciplinary. The acceptance of Chinese literature in the foreign world is still waiting to be examined, but Red Sorghum, one of masterpieces of Mo Yan has gained astonishing fame and popularity, it will attract more and more attention in the world especially under the strategy of Chinese culture going global. The significance is pro-founding.

4. CONCLUSION

Through Citespace visual analysis technology, this paper objectively analyzes the research status, hot spots and development trend of "Red Sorghum", and reveals the basic trend of Chinese culture going global in the past four decades. The development of theory and practice is becoming more and more mature. In addition, the depth and scope of the research on Red Sorghum have been continuously expanded, and the research focus has been expanded from theoretical exploration to practical application. The research topics tend to be diversified, diversified and interdisciplinary. Red Sorghum is one of the representatives of masterpieces of Chinese literature. By doing the research on Red Sorghum and taking this as the example to increase the speed of Chinese literature going out, to break through "western centralism" and open up a new world cultural pattern through our own efforts. (Xiping Zhang, 73)

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REFERENCES

- [1] Chen Yue, Chen Chaomei, et al., Principles and Applications of Citation Space Analysis -CiteSpace Practical Guide, Beijing: Science Press, 2014
- [2] Chu, Jun. A Narrative Study of Mo Yan's Works, Beijing: Science Press, 2017.
- [3] Davis-Undiano, R. C. A Westerner's Reflection on Mo Yan, Chinese Literature Today, 3(1-2), 21-25. DOI:10.1080/21514399.2013.11833993, 2013.

- [4] Ding Xiaozhi, Wu Ning. On Dialect Variation and Translation Strategies of Red Sorghum Clan from the Perspective of Foreground, *Journal of Chongqing Radio and Television University*, 29(02):75-80.doi:10.3969/j.issn.1008-6382.2017.02.013, 2017.
- [5] Goldblatt, H. Mo Yan's Novels are Wearing me out: Nominating Statement for the 2009. Newman Prize. *World Literature Today*, 83(4), 28-29, 2009.
- [6] Li, Guiling. *A Chronicle of Mo Yan's Literature*. Shanghai: Fudan University Press, 2014.
- [7] Lingenfelter, A. Howard Goldblatt on how the navy saved his life andwhy literary translation matters. *Full Tilt: A Journal of East-Asian Poetry Translation and the Arts*, 2. Retrieved from <http://fulltilt.ncu.edu.tw/>, 2007.
- [8] Moore, S. Chinese fiction writer Mo Yan wins Nobel Prize in Literature. *The Washington Post*, pp. 1-2, 2012
- [9] Mo, Yan. *Red Sorghum: A novel of China* (H. Goldblatt Trans). New York: Viking Penguin. (Original work published 1987), 1993
- [10] Post, C. W. "Sandalwood Death" by Mo Yan, trans. by Howard Goldblatt. Retrieved from <http://www.rochester.edu/College/translation/threepercent/?s=tag&t=howard-goldblatt>, 2014, April 7.
- [11] Xiping Zhang. *Cultural Soft Power, Cultural Value is the Key to Cultural Communication*, P73, 2019.
- [12] Wang, Wenqiang, *Reflections on the English Translation of Dialect Vocabulary in Red Sorghum Clan*, *Foreign Language and Literature*,, 30(04): 275-279, 2013.