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The Mode Reform of Cultivating Marketing Talents in Agricultural Vocational Colleges Based on the Perspective of Agricultural Enterprises

——A Case Study of Wenzhou Vocational College of Science and Technology

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Abstract We conduct survey on the characteristics of demand of agricultural enterprises for agricultural marketing talents from the following 6 aspects: the professional marketing talents needed urgently by the agricultural enterprises, the amount of demand of agricultural enterprises for the marketing talents, the jobs offered by the agricultural enterprises, the educational background of agricultural marketing talents favored by the agricultural enterprises, the requirements posed by the agricultural enterprises on the work experience of agricultural marketing talents, and the quality requirements posed by the agricultural enterprises on the agricultural marketing talents. We analyse the problems existing in the cultivation mode of marketing talents in agricultural vocational colleges as follows: the feature of major is not outstanding; the contradiction between supply and demand is prominent; it is disconnected with the practical needs of agricultural enterprises; the cultivation form of practical ability is simple. On the basis of this, taking Wenzhou Vocational College of Science and Technology as an example, we advance the new mode of cultivating inter-disciplinary talents integrating "marketing technique + technique marketing", and establish characteristic agricultural course combo system on the basis of vocational position orientation. In the meantime, we propose that we should conduct close college-enterprise cooperation with the local leading agricultural enterprises. This cultivation mode reform of talents is favorable for the agricultural enterprises, especially small and medium-sized agricultural enterprises to foster "marketable" agricultural marketing talents, elevate the comprehensive competitiveness of small and medium-sized agricultural enterprises, serve the local economy, and promote the development of modern agriculture, and China's agriculture, farmer, and countryside.

Key words Agricultural enterprises, Talent cultivation mode, Agricultural marketing talents, Marketing technique, Techniq

With the brisk pace of economic globalization, China's agriculture is developing toward the direction of industrialization and internationalization, so the market competition will be increasingly fierce. At present, China's agricultural enterprises, especially the small and medium-sized agricultural enterprises. are devoid of marketing and management talents badly. Most of the agricultural operators' previous major is agriculture, while in marketing management, some problems often arise such as amiss market orientation, blank of marketing plan, perceptual psychological analysis of consumers and so on, for want of advanced applied talents blessed with modern marketing theory and market control ability[1]. According to the follow-up investigation on the graduates whose major is marketing in vocational colleges and the feedback of employers, currently, the graduates whose major is marketing are still difficult to find jobs. The employment level is low, the salary is low and the production and sales are disjointed. In most cases, the employers hold that these graduates lack the ability to solve practical problems, and the major is not so distinctive, leading to the structural contradiction of asymmetric market demand and supply [2]. In the

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mean time, there are many problems existing in the cultivation mode of marketing talents in agricultural vocational colleges, for example, the feature of major is not outstanding [3], which fails to better reflect the characteristics of "agriculture", and fails to serve agricultural enterprises. Consequently, it is of great significance for us to explore the marketing talents cultivation mode with the characteristic of agricultural vocational education, in order to foster "marketable" agricultural marketing talents for the agricultural enterprises, especially small and medium-sized agricultural enterprises, to elevate the comprehensive competitiveness of small and medium-sized agricultural enterprises, to serve the local economy, and to promote the development of modern agriculture, and China's agriculture, farmer, and countryside.

1 The survey analysis of demand of agricultural enterprises for marketing talents

To further understand the characteristics of demand of agricultural enterprises for agricultural marketing talents, according to the actual need of agricultural enterprises, it should cultivate "marketable" agricultural marketing talents. We conduct questionnaire survey and interview on 575 agricultural enterprises in Zhejiang, Shanghai, Shenzhen, Chongqing, Jiangsu, Anhui, Shandong, Hebei and other provinces and cities. The result of survey indicates the characteristics of actual needs of agricultural enterprises for agricultural marketing talents, and the specific analysis is as follows.

- 1.1 The professional marketing talents needed urgently by the agricultural enterprises From the survey results, currently, what the majority of agricultural enterprises urgently need is agricultural marketing talents, accounting for 57.9%, followed by the common marketing talents, accounting for 26.3%. Obviously, the agricultural enterprises have a huge demand for agricultural marketing talents, while the agricultural enterprises have a relatively small demand for the talents who specialize in international business, e-commerce, business management and other fields, which has provided a realistic basis for cultivating agricultural marketing talents.
- 1.2 The amount of demand of agricultural enterprises for the marketing talents
 The results of survey show that the demand of agricultural enterprises for agricultural marketing talents is greater than the demand of agricultural enterprises for common marketing talents. Fig. 1 shows that the ratio of choosing "big" and "relatively big" concerning the demand of agricultural enterprises for agricultural marketing talents is greater than that of common enterprises for common marketing talents.

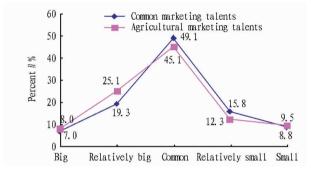


Fig. 1 Analysis of amount of demand of agricultural enterprises for marketing talents

1.3 The jobs offered by the agricultural enterprises

From the survey results, agricultural enterprises can offer more jobs for agricultural marketing talents, wherein businessman is the majority, accounting for 49.1%, followed by the position of marketing development, accounting for 45.6%, and the last is the position of marketing management, accounting for 35.1%. The proportion of marketing planning position, market survey staff position and chain management position is 26.3%, 19.3% and 15.8% respectively. Therefore, the agricultural marketing talents have chance to choose diverse jobs, with great expectation of employment.

1.4 The educational background of agricultural marketing talents favored by the agricultural enterprises The agricultural enterprises have the propensity to recruit the agricultural marketing talents with educational background of vocational college or polytechnics, accounting for 56.1%. Through interviews, we also find that the reason that enterprises prefer to recruit vocational college graduates, is that these graduates not only have the appropriate knowledge of theoretical basis, but also have strong practical ability. In addition, their educational level is not high, free of proclivity of being fastidious and demanding but inept. Most importantly, they have precise orientation of themselves, and can endure the ordeal and hardship of

work to some extent, which are the merits of vocational college graduates, especially for the position of businessman and position of market development. Then the agricultural enterprises show lesser preference for recruiting agricultural marketing talents with bachelor degree, accounting for 27.9%. Undergraduate students have relatively more solid theoretical basic knowledge, but their practical ability is relatively weak. They want more salary from enterprises, so they are suitable for jobs of basic marketing management. The students graduating from technical secondary school and the postgraduates are not favored by the enterprises, accounting for only 10.3% and 5.7%. This is mainly because that the students graduating from technical secondary school have low educational level and unsound skills, while the educational level of postgraduate is high, leading to high labor costs. Hence, cultivating agricultural marketing talents graduating from vocational colleges for agricultural enterprises, is in line with actual needs of enterprises, with broad market prospects.

- 1.5 The requirements posed by the agricultural enterprises on the work experience of agricultural marketing tal-Agricultural enterprises pose high requirements on the work experience of agricultural marketing talents. 57.9% of companies require the work experience of at least one year: 19.3% of companies require the work experience of at least two years: 15.8% of companies require the work experience of more than half year; only 7.0% of companies pose no requirements on the work experience of agricultural marketing talents. Thus it can be seen that agricultural enterprises' requirements on the work experience of agricultural marketing talents are extremely high. The high requirements on the work experience, in nature, are the requirements of enterprises on practical ability of employees needed. Therefore, when fostering agricultural marketing talents, we have to find ways to enhance students' practical and operational capability, and to make students accumulate the relevant work experience as far as possible.
- 1. 6 The quality requirements posed by the agricultural enterprises on the agricultural marketing talents. To fully know the quality requirements of agricultural enterprises on the agricultural marketing talents, and to conduct fostering of agricultural marketing talents purposefully, we conduct a major survey on this issue. From the survey results, agricultural enterprises pose high requirements on the quality of agricultural marketing talents in many aspects, which can be specifically shown in Table 1.

Table 1 reports that agricultural enterprises pose high requirements on the quality of agricultural marketing talents in many aspects, including requirement on certain professional marketing knowledge and skills, and requirement on agricultural basic knowledge, agricultural promotion technology, various means of agricultural production, marketing knowledge of agricultural products, skill knowledge of agricultural product broker and other agricultural technological knowledge. It also requires the agricultural marketing talents to have the spirit of bearing hardships and hard work, the spirit of hardworking, work ethics and sense of responsibility, moral quality and so on. From the

interviews, we also find that the extent of business leaders paying attention to the spirit of hardworking and work ethics and sense of responsibility, is perhaps even greater than the professional knowledge and skills. Therefore, when cultivating agricultural marketing talents, the colleges should take into account the actual requirements of agricultural enterprises, promote and strengthen the students' spirit of hardworking and work ethics and sense of responsibility. Certainly, agricultural enterprises also pose high requirements on agricultural marketing talents' practical and operational ability, ability of organizing

and managing, team writing skills, writing and oral communication skills, association ability, ability of analysis and judgement, and other general abilities, only with common requirements on foreign language level and computer rank. Thus, the quality reguirements of agricultural enterprises on agricultural marketing talents are all-around and multi-layered. This requires that the colleges should foster inter-disciplinary marketing talents with excellent skills and balanced development of knowledge, skills and quality, according to the actual needs of enterprises.

Table 1. Analysis of the quality requirements posed by the agricultural enterprises on the agricultural marketing talents

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Quality requirements	High	Relatively high	General	Relatively low	Low
Agricultural basic knowledge	8.8	43.9	36.8	5.4	5.3
Agricultural promotion technology	5.3	50.9	33.3	3.5	7.0
Various knowledge and skills of means of agricultural production and marketing of agricultural products	10.5	43.9	38.6	3.5	3.5
Knowledge and skills of brokers of agricultural products	5.3	50.9	36.8	3.5	3.5
Knowledge and skills of marketing major	14.0	56.1	24.6	1.8	3.5
Foreign language level	8.8	29.8	47.4	8.8	5.3
Computer rank	0.0	38.6	56.1	3.5	1.8
Ability of practical operation by hands	10.5	63.2	21.1	5.3	0.0
Ability of organizing, coordinating and managing	12.3	57.9	29.8	0.0	0.0
Team writing ability	19.3	56.1	24.6	0.0	0.0
Ability to learn	14.0	56.1	28.1	1.8	0.0
Ability of writing and verbal expression	17.5	66.7	15.8	0.0	0.0
Ability of interpersonal relationship	21.1	64.9	14.0	0.0	0.0
The ability to meet an emergency and adaptability	28.1	45.6	26.3	0.0	0.0
Ability of analysis and judgement	26.3	61.4	10.5	1.8	0.0
Moral quality	40.4	43.9	15.8	0.0	0.0
Physical quality	19.3	61.4	19.3	0.0	0.0
Work ethics and sense of responsibility	40.4	49.1	10.5	0.0	0.0
The spirit of hardworking	45.6	45.6	8.8	0.0	0.0
The spirit of innovation	29.8	56.1	14.0	0.0	0.0
The spirit of bearing hardships and hard work	43.9	49.1	7.0	0.0	0.0
Overall quality and ability	19.3	63.2	17.5	0.0	0.0

The problems existing in the cultivation mode of marketing talents in agricultural vocational colleges

According to questionnaires, interviews, surveys and existing literatures, at present, there are mainly the following problems in the mode of cultivating agricultural marketing talents graduating from vocational colleges.

- 2.1 The feature of major is not outstanding High agricultural education is across the education and agriculture, with strong industrial pertinence and particularity of development, responsible for dual mission of offering talents and technological support for agriculture and rural modernization[1], and so is the agricultural vocational colleges. For the time being, although most of the agricultural vocational colleges set up the major of marketing, it stops short of blending the personality and characteristics of agricultural vocational colleges into the marketing talents cultivation mode, so that the marketing talents fostered by agricultural vocational colleges resemble the marketing talents fostered by non-agricultural agricultural vocational colleges. It fails to highlight the characteristics of "agriculture", and provide services for local regional economy and agricultural enterprises.
- The contradiction between supply and demand is **prominent** The greatest problem confronted by the marketing

talents graduating from agricultural vocational colleges is the contradiction between supply and demand, that is, there is a conspicuous gap between the marketing graduates fostered by the colleges and the demand of agricultural enterprises for marketing talents^[2]. On the one hand, the society has a huge demand for professional agricultural marketing talents, while on the other hand, the marketing graduates from agricultural vocational colleges can not successfully achieve employment. In the light of the feedback of employers, their evaluation on the marketing graduates from agricultural vocational colleges who have successfully achieved employment is not so good. Thus, it can be clearly seen that there is serious contradiction between demand and supply in the marketing graduates from agricultural vocational colleges.

2.3 It is disconnected with the practical needs of agricultural enterprises Development of economic globalization poses new requirement on the knowledge structure of marketing talents, and the development of modern agriculture poses higher requirement on the agricultural marketing talents^[3]. At present, there are many serious problems in the marketing course setting of agricultural vocational colleges in China. The course setting, with no pertinency, is not in accordance with the demand of agricultural enterprises for marketing talents, failing to highlight the characteristics of "agriculture". In addition, the course setting is stale, which does not conduct corresponding adjustment to add new courses timely in line with the change of demand of agricultural enterprises for marketing talents. It is noteworthy that there are too many theoretical courses, while there is a shortage of courses that can promote all-around ability of students, especially the practical ability and operational ability. 2.4 The cultivation form of practical ability is simple In terms of cultivation of practical ability, most of the agricultural vocational colleges only arrange some simple practices in the teaching plan^[4], such as awareness training, professional internship. Moreover, the assessment is not rigorous, and the evaluation index is missing, not to mention the follow-up of process of assessment. Students treat these internships with the mentality of completing tasks, and a lot of students do not complete all tasks of internship effectively according to the requirements, and even the fraud phenomenon is serious, which makes the practical ability fail to be forged and elevated.

3 The mode reform of cultivating marketing talents in agricultural vocational colleges based on the perspective of agricultural enterprises—a case study of Wenzhou Vocational College of Science and Technology

The agricultural vocational colleges should timely adjust and revise the cultivation objective of marketing major, according to the social development, industrial structural adjustment and dynamic changes of market demand. The agricultural vocational colleges should also orientate the marketing major to be targeted for the rural areas and agriculture, explore domestic and foreign markets for agricultural enterprises, and foster the inter-disciplinary talents who not only master basic theory and skills of marketing, but also master agricultural basic knowledge and skills. In major orientation, we need to conduct the cultivation of marketing talents graduating from the agricultural vocational colleges, according to the actual need of agricultural enterprises for agricultural marketing talents. Hence. the marketing major in agricultural vocational colleges, is not only to cultivate the excellent marketing talents needed by the agricultural enterprises, but also to undertake the mission of serving agriculture, farmers and countryside and integrating urban areas and rural areas, so as to highlight the characteristics of agricultural colleges, and emphasize their own personality. Now we take Wenzhou Vocational College of Science and Technology as a case, to provide reference for other agricultural vocational colleges.

3.1 Introduction of Wenzhou Vocational College of Science and Technology Wenzhou Vocational College of Science and Technology is established on the basis of Wenzhou Academy of Agricultural Sciences. Wenzhou Academy of Agricultural Sciences is an institution integrating teaching, scientific research, demonstration and promotion, the sole institution integrating agricultural scientific research and teaching in China. Wenzhou Vocational College of Science and Technology, with 50 years of running school and scientific research, has great influence in Wenzhou. It has achieved many significant scientific

research results, awarded by the State Council. It once received three National Science and Technology Progress Awards, two National Invention Awards, 50 provincial and ministerial level scientific and technological progress awards, and 200 municipal level science and technology achievement awards. Research field involves seed cultivation of agricultural crops, cultivation techniques, plant protection, ecological environment, testing of agricultural products, veterinary and animal husbandry, food processing, landscape design, technology information and so on. The breeding of white pigs and cultivation of rice resources as well as invention of breeding technology of floating waterweed and so on in Wenzhou, win good reputation across the agricultural technological cycle. Wenzhou Vocational College of Science and Technology has established close scientific research partnership with the research institutions, companies, and enterprises in Russia, Israel, Australia, New Zealand and other countries, as well as Zhejiang University, Zhejiang Academy of Agricultural Sciences, Fujian Academy of Agricultural Sciences and other universities and research institutions. As a matter of fact, Wenzhou Vocational College of Science and Technology has played a very important role in "139 Campaign of Enriching People", "Vegetable Basket Project", "Food Worry-free Project", development of benefit agriculture and modern agriculture, new socialist countryside construction and other aspects.

3.2 The mode reform of cultivating marketing talents in Wenzhou Vocational College of Science and Technology

The marketing major in Wenzhou Vocational College of Science and Technology, on the basis of rich agricultural resources, highlights the features of "agriculture", carries out radical reform on the cultivation mode of marketing talents, takes the lead to advance the new mode of cultivating "marketing technique + technique marketing" inter-disciplinary talents, establishes agricultural course combo system with the characteristics of agriculture, conducts close college-enterprise cooperation with the local leading agricultural enterprises, and achieves good results.

3. 2. 1 Implement the new mode of cultivating " marketing technique + technique marketing " inter-disciplinary talents. Through this model, it is to cultivate the inter-disciplinary agricultural marketing talents who not only are equipped with the marketing skills and specialized agricultural technology promotion ability, but also have the broker vocational qualification of agricultural products with high quality and excellent skills. Relying on rich resources and agricultural scientific research base of the college, it is to integrate resources advantages of Department of Trade and Economic Management, Department of Agricultural Biotechnology, Department of Landscape, Department of Animal Science, and other advantages, combine the marketing major and agriculture major with pertinence, and implement the new mode of cultivating " marketing technique + technique marketing" inter-disciplinary talents from characteristic agricultural vocational colleges whose major is marketing. It is not only to equip the students with complete marketing expertise, but also to equip the students with agricultural professional technology knowledge, so as to realize organic combination of marketing and agricultural technology promotion, and foster "marketable" agricultural marketing talents for agricultural enterprises. This talents cultivation mode can be specifically shown in Fig. 2.

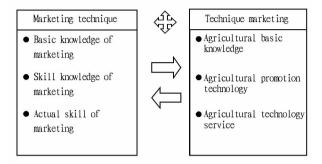


Fig. 2 "Marketing technique + technique marketing" interdisciplinary talent cultivation mode

For the implementation of this new mode of cultivating " marketing technique + technique marketing" marketing talents graduating from characteristic agricultural vocational colleges, it at first conducts questionnaire survey research on the demand of agricultural enterprises for marketing talents graduating from agricultural vocational colleges, takes into account the characteristics of needs, conducts close college-enterprise cooperation with the local leading agricultural enterprises, and lays down cultivation plan of professional talents and core curriculum standard of professional skills. In order to make the students combine marketing technique and agricultural promotion technology organically, it sets some core courses and skills courses that the marketing students must master, and also sets the course of marketing of agricultural products, the course of marketing of pesticides, the course of marketing of chemical fertilizers, the course of seed marketing, the course of broker skill knowledge of agricultural products, the course of agricultural technology promotion and other courses, so that the students master general marketing knowledge and skills, and the marketing knowledge of relevant agricultural technology, effectively providing services for agricultural enterprises. Practice has proved that the local agricultural enterprises favor the graduates Table 2 Vocational position course combo

from Wenzhou Vocational College of Science and Technology. because they are not only equipped with basic knowledge of agriculture, but also equipped with the necessary basic marketing knowledge and skills. They are dexterous in practice, and make progress quickly.

Establish characteristic agricultural course combo sys-3.2.2 tem. Wenzhou Vocational College of Science and Technology has overhauled formerly stale, repetitive, segmented, and scattered teaching content and course system, and established novel, advanced, refined, and integrated course combo system with the characteristics of agriculture. In the first and second year, it sets principal marketing courses and general skills training courses, such as marketing, market survey and forecasting, marketing planning, chain operations and management, channel management, marketing diagnosis, network marketing, selling and negotiation skills and other marketing courses, military training, college English, basic computer, economic writing, speech and eloquence, social etiquette, business management and other general ability cultivation course. Through these courses, it is mainly to cultivate the students' basic marketing knowledge and skills and various kinds of general abilities. From the third academic year, it is to implement course combo system on the basis of vocational position orientation, changing the scattered, chaotic, and poor situation of selective courses formerly. The students no longer need to conduct scattered option on all the courses one by one. They can conduct the option of course combo according to their own characteristics and employment intentions. In the light of the actual position needs of agricultural enterprises, at present, it sets up agricultural pesticide marketing course combo, chemical fertilizer marketing course combo, seed marketing course combo, and agricultural product marketing course combo, so that the students can choose the course combo suitable for themselves according to their own characteristics and employment intentions, and conduct skill strengthening training of relevant vocational position, to successfully achieve employment. The vocational position course combo on the basis of vocational position orientation can be specifically seen in Table 2.

Vocational position Name of course combo Course setting within combo Vocational position A: Agricultural Course combo A: Agricultural pesticide Basic knowledge of agricultural pesticide pesticide marketing position marketing course combo Production technology of agricultural pesticide Use technology of agricultural pesticide Quality test and scientific use of agricultural pesticide Agricultural pesticide marketing Vocational position B: Chemical Course combo B: Chemical fertilizer Basic knowledge of chemical fertilizer fertilizer marketing position Analysis of chemical fertilizer marketing course combo Scientific use of chemical fertilizer Quality standard and test of chemical fertilizer Chemical fertilizer marketing Vocational position C: Seed Course combo C: Seed marketing Basic knowledge of seed Rationale and technology of seed storage marketing position course combo Rationale and technology of seed test Test technology of seed quality Seed marketing Vocational position D: Agricultural Course combo D: Agricultural Agricultural commodity knowledge product marketing position product marketing course combo Storage and processing technology of agricultural products Quality and test of agricultural products Broker skill knowledge of agricultural products Marketing of agricultural products

Practice shows that students generally prefer this career-oriented course combo system. They think that firstly this can reduce blindness in the process of choosing courses; secondly, this can reduce the difficulty in the process of choosing courses; thirdly, this can improve the systematicness and pertinence in the process of choosing courses, conducive to pre-service intensive cultivation and intensification training of vocational ability.

3.2.3 Conduct close college-enterprise cooperation with the local leading agricultural enterprises. As the leading enterprise is the leader and fugleman of the industry, having the voice right in the industry, so the cooperation with the leading enterprise can gain high ground in the cultivation of talents, and effectively improve the quality of talents training. Therefore, we conduct close college-enterprise cooperation with the local leading agricultural enterprises in Wenzhou, such as China Nanxijiang Agricultural Corporation, Zhejiang Dahaoda Food Company, and so on. Wenzhou Vocational College of Science and Technology and the enterprises carry out close cooperation in development planning, major building, course building, teacher building, practice teaching, competency assessment, research and development, employment and enrollment, student management and other links. The agricultural enterprises engage in the whole process of talents cultivation, and cultivate " marketable" agricultural marketing talents. Since the implementation of forgoing new mode of talents cultivation in the marketing major of Wenzhou Vocational College of Science and Technology. the employment rate over the years has reached more than 98%, and the rate of job assignment in line with training has reached more than 90%. It has fostered a large number of " marketable" agricultural marketing talents for the local agricultural enterprises, which receives unanimous recognition and praise of the employers and in the mean time, makes contribution to the local economic development, and solving issues concerning agriculture, countryside and farmers.

References

- [1] YANG SR. The strategic position and function of higher agricultural education in China[J]. Higher Agricultural Education, 2005(8): 9. (in Chinese).
- [2] LIANG J. Employment-oriented marketing professional training model and experiential teaching reform[J]. Journal of Higher Education, 2009(7): 234. (in Chinese).
- [3] GUO QR. Problem and countermeasure in the development of agricultural enterprises in China [J]. Journal of Anhui Agricultural Sciences, 2006(22): 6018. (in Chinese).
- [4] YANG YZ, ZHANG XW. A probe into the model of cultivating marketing talents in agricultural university[J]. Journal of Hunan Agricultural University: Social Science, 2004(8): 75. (in Chinese).
- [5] LU Q, LU J, HUANG B, *et al.* Establishment and application of food defense plan in food processing enterprises [J]. Asian Agricultural Research, 2009, 1(2): 21 –23,28.
- [6] LIANG X, LIN T. Internal enterprise and external enterprise of agriculture—one of the series study on agricultural enterprise [J]. Southwest China Journal of Agricultural Sciences, 2007(4): 850 853. (in Chinese).
- [7] MEI QJ. Technological environment and innovation of township enterprises [J]. Asian Agricultural Research, 2009, 1(3): 49 52.
- [8] WEI ZY, LU YM, WEI CL, et al. Strategic visualization of agricultural science and technology independent innovation system construction in Guangxi[J]. Southwest China Journal of Agricultural Sciences, 2011(4): 1592 – 1597. (in Chinese).
- [9] LI GM. Differential marketing of agriculture products dominated by rural cooperative economic organizations[J]. Asian Agricultural Research, 2009, 1(6):20 –23, 33.
- [10] GUO XQ. Import & export trade change history and development countermeasures of agricultural products in ten years (2000 –2010) of Guangxi[J]. Southwest China Journal of Agricultural Sciences, 2011(4): 1587 – 1591. (in Chinese).
- [11] HUANG G. Development on new model of farmer organization supported by science technology [J]. Southwest China Journal of Agricultural Sciences, 2011(2): 794 798. (in Chinese).

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