





# 中国香根草网络

CHINA VETIVER NETWORK

# Networking for Long Term National Vetiver System Development in China

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- **Organizing Conferences and Training Courses**
- **Multiple Publications and training materials**
- **03** Promote Vetiver Moving to Colder North China
- **04** Vetiver Science and Technology Popularizing
- **Help Local People Launching New Projects**

#### **China Vetiver Network (CVN)**



China Vetiver Network (CVN)
was founded in 1996
supported by The Vetiver Network International
and Chinese Academy of Sciences

香根草系統及其在中國的研究與應用



Vetiver System and Its Research and Applications in China

#### **Important roles**

- **Collect and review experience, success and lessens obtained in the past years;**
- **\* Look into future development;**
- \* Encourage and coordinate possible cooperations at provincial or regional scale;
- \* Promote understanding among vetiver scientists in order to learn each other and to popularize new research results;
- \* Establish linkage among new cooperators or between different disciplines and help participants find new friends and new cooperators;
- \* Seek for new cooperation on joint projects.

#### National/International conferences

Table 1 National/international conferences or workshops organized by China Vetiver Network

Year	Conference title	Location	Target	
1997	International Vetiver Workshop	Fuzhou	Review experiences	
1999	International Vetiver Bioengineering for Soil and Water Conservation & engineering Protection	Nanchang	Promote engineering protection	
2003	ICV-3	Guangzhou	Promote international exchange	
2015	VS for water resource protection	Kunming	Protect Dianci Lake environment	
2019	Workshop on the possibility of organizing ICV-8 in Kunming	Kunming	Organizing ICV-8	

#### National/international conferences





ICV-3 (Guangzhou)



ICV-8 (Kunming)

**1997** 

1999

**2003** 

**2015** 

**2019** 



**International Vetiver Conference (Nanchang)** VS for water conservation (Kunming)



#### Other regional conferences

#### **Vetiver Industry Demonstration Conference**

**Location: Lishui of Zhejiang Province** 

Time: September 2017

**Target: Promote vetiver industry development** 

#### **Vetiver for Weihe River Basin Protection**

Location: Xi'an of Shaanxi Province

Time: November 2017

Target: Use vetiver system to control water and soil erosion

along the river and to improve water quality

#### Workshop on Using Vetiver for River Bank Protection in Anhui Province

**Location: Nanjing** 

Time: January 2020

Target: Use VS to replace concrete materials



Workshop on VS industry (Zhejiang 2017)



Workshop on river bank fixing (Nanjing 2020)

# **Training course organization**

**Table 2 Handicraft training courses organized by China Vetiver Network (2007-2015)** 

No.	Time	Location	Persons	Purpose and target	
1	2007.10.22-11.3	Lipai, Guangxi	25	Introduce handicraft into China	
2	2009.4.28-30	Maluo, Gangxi	36	Extension through local government	
3	2009.10.22-28	Batan, Guangxi	20	Improve products quality and train trainers	
4	2009.10.29-11.11	Zhoujia, Guangxi	24	Further extension in Guangxi	
5	2009.11.16-29	Changpu, Anhui	22	Introduce handicraft into Anhui	
6	2010.10.11-17	Shuifan, Anhui	36	Improve product quality	
7	2011.10.10-23	Dafan, Anhui	20	Extension in Anhui province	
8	2011.10.24-11.6	Ganghe, Anhui	20	Introduce handicraft into high mountains	
9	2013.10.8-13	Dafan, Anhui	27	Train trainers for further extension	
10	2013.10.16-29	Zishu, Anhui	26	Introduce handicraft into Zishu	
11	2015.10.9-13	Dafan, Anhui	29	Improve work efficiency	
12	2015.10.14-23	Huangwei, Anhui	25	Push handicraft to markets	

# Handicraft training courses









Each course lasted 2 weeks, with over 20 participants



The 1<sup>st</sup> handicraft training course (2007) with 3 Thai trainers invited



Photo exhibition

## **Promote economy development**

#### **Functional**





#### **Economic**



#### **Decorative**





Through the training course farmers got knowledge on vetiver handicraft, which started a new media for them to earn money.

#### Other trainings

- **♦** Vetiver for economic tree production
- Vetiver based agroforestry
- **♦ Biogas production for environmental protection**



Vetiver for rural infrastructure protection: road, ditches, slopes, terraces.







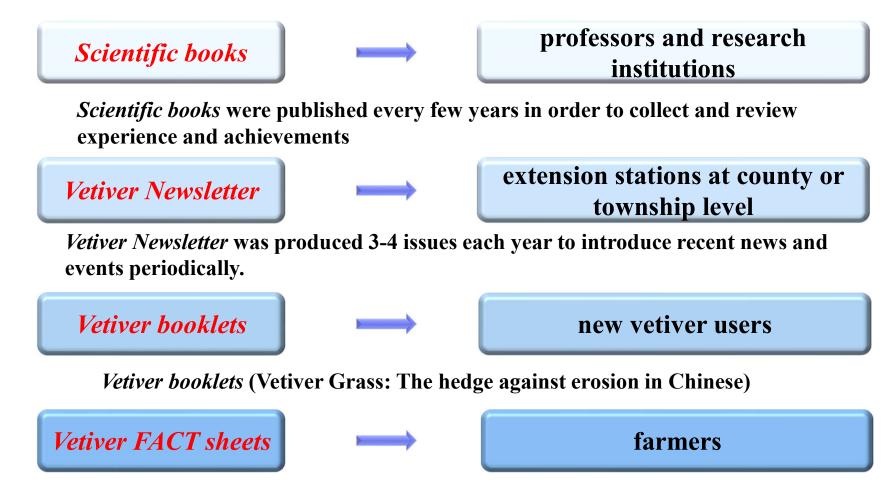






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#### Multiple publications



Vetiver FACT sheets is printed on color paper

#### **Scientific books**

**Table 3 Scientific books produced by China Vetiver Network** 

Time	Title	Language	Number of pages
1998	Vetiver Research and Development	Chinese	192
2003	Vetiver System and Its Research and Applications in China	Chinese &English	128
2008	The Theory and Practice of Vetiver System	Chinese	241
2016	The Research and Application of Vetiver System	Chinese	236





**Vetiver Books and Newsletters** 





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# **Vetiver planting**

Since 1988, the vetiver grass was widely The warmer climate encouraged people to move vetiver to planted in the south of China. colder north China. **Zhejiang** Danjiangkou reservoirs Xianyang 1988 2009 2015 2017 Mine tail re-vegetation (Hancheng) Guangzhou Weinan

## Field investigations



#### Jiji grass (Achnatherum splendens)

- ——a perennial grass in northern China has similar features with vetiver
  - Endure drought
  - **Endure** alkali
- **Endure salt**
- **■** Endure low temperature



Jiji grass



**Fully fixing steep slopes** 



Cultivated Jiji (Inner Mongolia 2019)

The function of Jiji grass on soil conservation was further proved.

## Field investigations

China Vetiver Network organized several field investigations in Ningxia, Shanxi, and Inner Mongolia in 2006, 2009, 2012 and 2016 respectively.









Investigation on Jiji grass in Shanxi Province (2016).

Jiji investigation Inner Mongolia (2017)





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#### **Extension and education**

The science popularizing should focus on children in order to let them know at childhood the importance of soil conservation and the function of VS on erosion control.

Vetiver Science and Technology Popularizing Garden included rice field, hilly area, terraces, water ponds, roads and ditches, etc.





**Working group** 



Air map of the garden (2018)

#### **Vetiver demonstrations**

#### Vetiver demonstration bases on soil erosion control

■ rice borers control ● the protection of road and ditches ● countryside landscaping ● vetiver handicraft

Cement Road blocks fixing **Demonstration** on VS **Monitoring** vetiver **Ditches** growth

## Children's performance

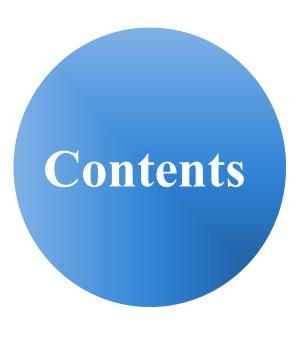
Children's performance on VS for rice stem borers control (2020, Guangzhou)





Through the performance, children understand some basic knowledge such as soil erosion, food safety, beneficial insects, insecticide tolerance, etc.





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## **Application of the projects**

In the recent decade numerous VS projects were conducted by local government, institutes or companies throughout the country. They did a lot on VS development.



#### **Application of the projects**

#### The Fuxianhu Lake

**Location: Yunnan Province** 

Water area: 216.6 km<sup>2</sup>

Water erosion area :208.8 km<sup>2</sup>

**Sediments: about 345600 ton/year** 



A new projects is to launch in Yunnan province (2018)

To control soil erosion and improve water quality totaling 7.5 million of vetiver tillers has been planted.

#### Thirty-six-feet Lake of Pintan Island

**Location: Fujian Province** 

Water storage capacity: 12.9 million M<sup>3</sup>

**Function : drinking water supplier** 



Investigation in Fujian Province (2019)

Since the soil derived from granite with little clay the soil erosion and collapse are serious, especially in the raining season.



