

BY: DR A.T.N. ABUBACKER

# GINGER: A RHIZOME WITH HIGH EXPORT VALUE

Despite being the largest producer of ginger in the world, India's share in the world trade of ginger is only 6 per cent. In order to increase exports, we need to improve ginger yield by introducing high-yielding varieties.

**G**inger is a tropical species native to South-east Asia, belonging to the family *Zingiberaceae*. The English term 'ginger' originated from the Sanskrit word *Sringavera*. Botanically known as *Zingiber Officinale*, it is the most popular hot spice in the world. The useful part of this plant is the underground rhizome.

Ginger has a long and well documented history of both culinary and medicinal use throughout world his-

tory, especially in Chinese, Indian and Japanese medicinal care. In Indian Ayurvedic medicine, ginger is used as an anti-inflammatory. It has a long history of use in South Asia, both in dried and fresh form. The Hindu epic *Mahabharata* describes a meal where meat stewed with ginger and other spices was served. In the *Manasollasa* literature written in the 11th century, ginger was mentioned as a flavouring agent for butter milk. Its use as a food became much more widespread by the 13th century with the advent of Muslim rule in India.

Ginger was exported from India to the Roman Empire 2,000 years ago. Arab merchants controlled the ginger trade. Ginger became one of the most commonly traded spices during the 13th and the 14th centuries. In the 16th century, it was introduced to Africa and the Caribbean.

Ginger is cultivated in India, China, Japan, Indonesia, Australia, Nigeria and West Indies. India is the largest producer and consumer of ginger in the world. In India, ginger is pro-

Table II  
Area and Production of Ginger in the World

Year	Area (hect)	Production (MT)
1998	312,108	864,760
1999	308,631	952,222
2000	305,696	953,152
2001	310,923	988,951
2002	317,099	1,007,503
2003	341,360	1,109,833
2004	341,829	1,141,319
2005	372,271	1,264,891
2006	414,183	1,337,188
2007	429,481	1,387,445
2008	421,336	1,605,444
2009	427,423	1,618,627

Source: FAO Estimate

Table I  
Area, Production and Yield of Ginger in India

Year	Area ('000 hectares)	Production ('000 tonnes)	Yield (kg/hect)
1997-98	75.6	252.1	3,335
1998-99	77.6	263.2	3,392
1999-2000	80.8	282.6	3,498
2000-01	86.2	288.0	3,341
2001-02	90.8	318.0	3,502
2002-03	90.8	317.0	3,500
2003-04	85.1	301.9	3,548
2004-05	95.3	359.0	3,767
2005-06	110.6	391.2	3,537
2006-07	105.9	370.3	3,497
2007-08	120.05	710.48	5,918
2008-09	138.47	795.02	5,760

Source: Spices Board, Cochin

duced in Orissa, Kerala, Karnataka, Arunachal Pradesh, West Bengal, Sikkim and Madhya Pradesh. Kerala is the largest ginger producing state, accounting for about 33 per cent of the total production in India. Cochin ginger (NUGC) and Calicut ginger (NUBK) are the popular Indian ginger varieties in the world market.

Ginger is available in the form of oil, oleoresins, ground ginger and fresh ginger. Light-coloured ginger has traditionally been priced higher for its subtle lemony aroma. Dark

ginger has more heat and is favoured for extraction purposes. Fresh ginger is used as a vegetable. Out of the total production of ginger, about 30 per cent is converted into dry ginger, 50 per cent consumed as green ginger and the rest used as seed material. Dry ginger is produced mainly in Kerala and a major share of the produce is exported.

It can be inferred from Table I that area, production and yield of ginger in India have been continuously increasing over the years.

## Ginger cultivation in the world

Nigeria accounts for the largest area (about 55 per cent) under ginger cultivation in the world. India too has a predominant position contributing about 36 per cent of the world's total ginger production. But productivity of ginger in India is very poor compared to that of the US. The cultivation area and production of ginger in the world are shown in Table II. The area under ginger cultivation in the world was 427,423 hectares in 2009, with production of 1,618,627 tonnes.

World trade in ginger is estimated at \$190 million per year. India's share in the ginger trade is only 6 per

Table III  
**Export of Ginger from India During 1997-98 to 2010-11**

Year	Quantity (tonnes)	Value (Rs million)
1997-98	28,268	726.27
1998-99	8,683	405.83
1999-2000	8,923	325.35
2000-01	6,288	268.20
2001-02	6,464	231.15
2002-03	8,461	239.66
2003-04	5,000	234.05
2004-05	14,908.13	592.94
2005-06	10,890.43	458.06
2006-07	9,661.34	477.78
2007-08	8,332.91	329.61
2008-09	8,836	499.80
2009-10	12,175	690.80
2010-11 (April-June)	4,595	284.40

Source: Spices Board, Cochin

cent as against China's 57 per cent. In the ginger oil and oleoresin trade, India dominates with 50 per cent share. Garbled/ungarbled, bleached/unbleached varieties have a predominant position in ginger export. Cochin ginger is popular and it fetches a premium price because of its superior quality. The estimated world import of ginger is around 300,000 tonnes



Table IV  
**Export of Ginger in the World**

Year	Quantity (tonnes)	Value ('000 \$)
1997-98	174,185	142,315
1998-99	155,985	107,789
1999-2000	204,055	122,084
2000-01	243,173	131,632
2001-02	249,933	124,576
2002-03	290,992	125,922
2003-04	311,405	135,603
2004-05	291,484	277,619
2005-06	379,630	319,487
2006-07	385,406	253,091
2007-08	418,513	258,645
2008-09	421,044	342,356

Source: FAO Estimates

per year. India's share in ginger export is estimated at 13,000 tonnes per year, which is only 2 per cent of its production. The figures relating to ginger export from India during 1997-98 to 2008-09 are given in Table III, while ginger export at the world level is shown in Table IV.

## Improving cultivation

To improve ginger cultivation, the following measures are recommended:

1. Introduce high-yielding varieties in ginger
2. Supply planting materials in time
3. Reduce the yield gap
4. Introduce short-duration varieties
5. Popularise fresh ginger processing
6. Encourage cultivation of organic ginger
7. Strengthen agricultural research

The author is head and associate professor in PG Department of Economics, Dr Zakir Husain College, Ilayangudi, Sivaganga, Tamil Nadu