



SESAME

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SESAME: THE UNDEREXPLOITED ORGANIC OILSEED CROP

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SESAME (*Sesamum indicum* L.) is an ancient oilseed crop.

Family Pedaliaceae.

- ***Benniseed***
- ***Gingelly***
- ***Sim sim***
- ***Til***

Average seed content: 53% oil and 26% protein
Oil contains anti-oxidants: sesamin, sesamolin, sesaminol and sesamol

A background image of a sesame field with green plants and yellow flowers. The text is overlaid on a white rectangular area in the center.

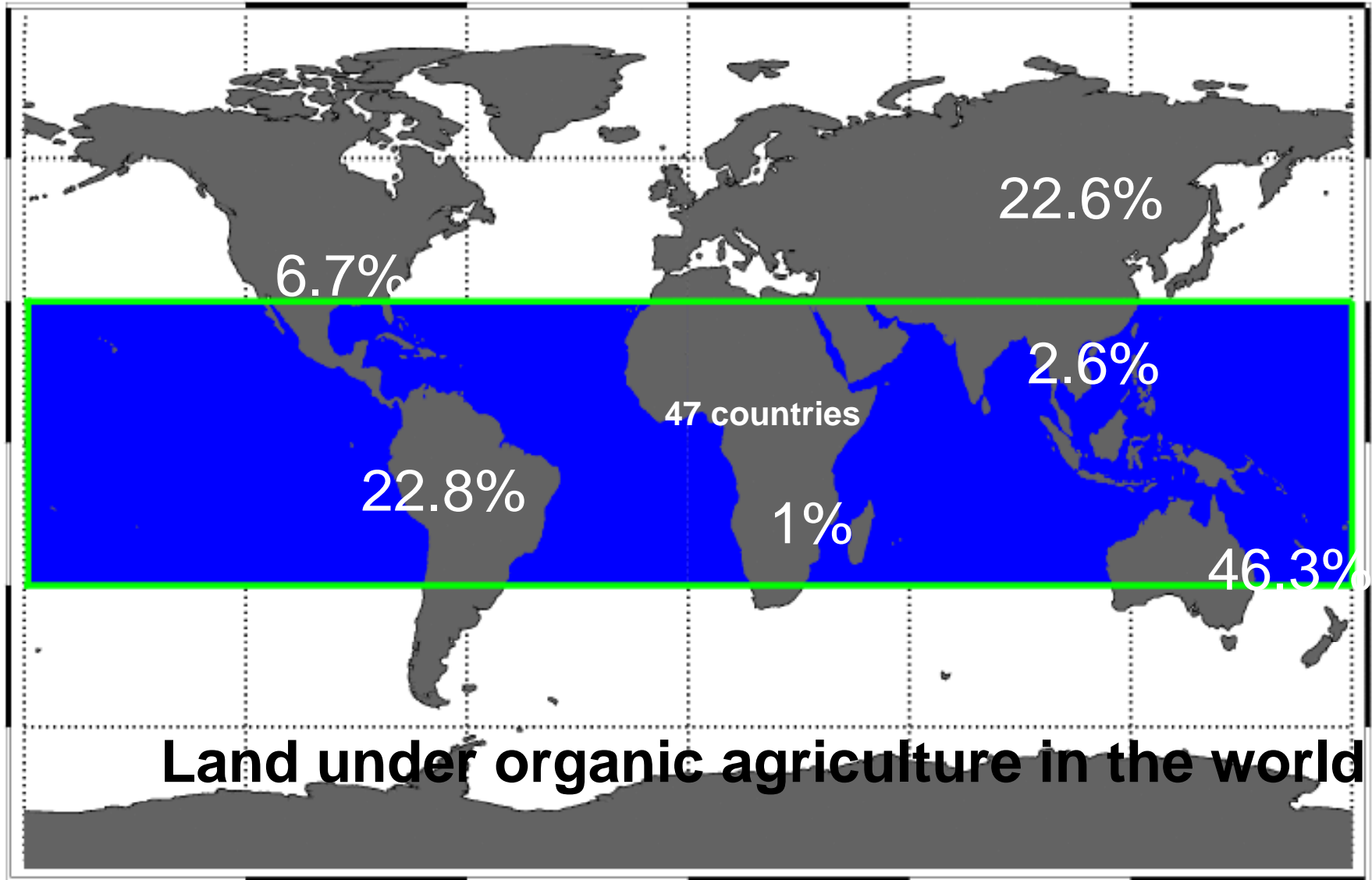
WHY GROW SESAME?

- **More profitable than most crops with limited resources**
- **Less prone to risk than most other crops**
- **Very drought and insect tolerant**
- **Suppresses the root-knot nematode and cotton root rot for the following crop**
- **Increase moisture retention and soil tilth**
- **Very minimal damage from rodents e.g. birds and rats**
- **Requires just 500-650 mm per annum**

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Area: Tropics

Longitude: [-180.0, 180.0] Latitude: [-30.0, 30.0], land+sea grid points



REGIONAL SESAME PRODUCTION AND TRADE

AREA	AREA HARVESTED (ml ha)	PRODUCTION (tons)	IMPORTS (tons)	EXPORTS (tons)
Asia	4.48	2,547	6901	342
Africa	2.80	953	60	422
South America	0.14	79	4	54
Central America	0.13	81	32	37
North America	0	0	54	3

Adopted from FAO, 2005

EIGHT MAJOR SESAME WORLD PRODUCERS

COUNTRY	AREA HARVESTED (‘000 ha)	PRODUCTION (tons)
CHINA	661	800
INDIA	1850	750
MYANMAR	1370	606
SUDAN	1700	331
UGANDA	211	121
NIGERIA	165	83
PAKISTAN	135	75
ETHIOPIA	93	72

MAJOR SESAME EXPORTERS

COUNTRY	EXPORTS (tons)	IMPORTS (tons)
SUDAN	209	0
INDIA	173	2
ETHIOPIA	84	0
MYANMAR	46	0
CHINA	46	153
NIGERIA	44	0
TANZANIA	28	0
THAILAND	25	13
PARAGUAY	25	0

MAJOR SESAME IMPORTERS

SN	COUNTRY	IMPORT (tons)	EXPORT (tons)
1	JAPAN	171	0
2	CHINA	153	46
3	REPUBLIC OF KOREA	88	0
4	TURKEY	87	4
5	USA	47	3
6	SYRIA	46	0
7	ISRAEL	36	0
8	EGYPT	35	4
9	MEXICO	28	12
10	NETHERLANDS	27	16
11	GERMANY	27	2
12	GRECEE	26	2
13	LEBANON	24	0

SOME FACTS ABOUT SESAME TRADE

- Africa produces 26% of world sesame
- Asia produces 70% of world sesame
96%
- Africa exports 38% of its production
- Asia exports 13% and imports 2x as much
- Out of 16 world sesame major producers, 6 are in Asia and 8 in Africa and they account for 87% of the production
- Organic sesame market has shown an **annual growth rate of 50%** (EPOPA, 2005)

CONSTRAINTS TO MEETING MARKET DEMAND FOR SESAME

- **Cultivation of low yielding dehiscent varieties with low harvest index values**
- **Significant yield loss during threshing**
- **Lack of agricultural inputs such as improved varieties**
- **Lack of appropriate storage facilities**



PREMIUM QUALITY REQUIREMENTS FOR SESAME SEED EXPORT

- **1000 seed weight >3g**
- **40-50% oil content**
- **pearly-white seed colour**

AGRONOMIC TRAITS OF SOME IMPROVED SESAME VARIETIES

VARIETY	1000SWT (g)	OIL CONTENT (%)	SEED YIELD (kg/ha)
E-8	3.4	50.0	0.77
PBTil	3.0	45.0	1.05
NCRIBEN-01M	3.3	45.0	0.85
NCRIBEN-02M	3.0	45.0	0.92
NCRIBEN-03L	2.6	40.0	1.23
Yandev 55	2.5	40.0	1.11
Ex-SUDAN	3.0	50.0	1.21
Lsd (0.05)	0.22	2.38	ns

ns: not significant

WAY FORWARD

- ✓ Develop high yielding varieties and provide their seeds for farmers
- ✓ Develop appropriate harvesting procedures
- ✓ Identify market outlets and create opportunities for farmers
- ✓ Improve smallholder status to large scale status
- ✓ Explore other sectors of sesame e.g value addition

OPEN SESAME

THANK

YOU

FOR LISTENING