



Coconut Based Cropping System

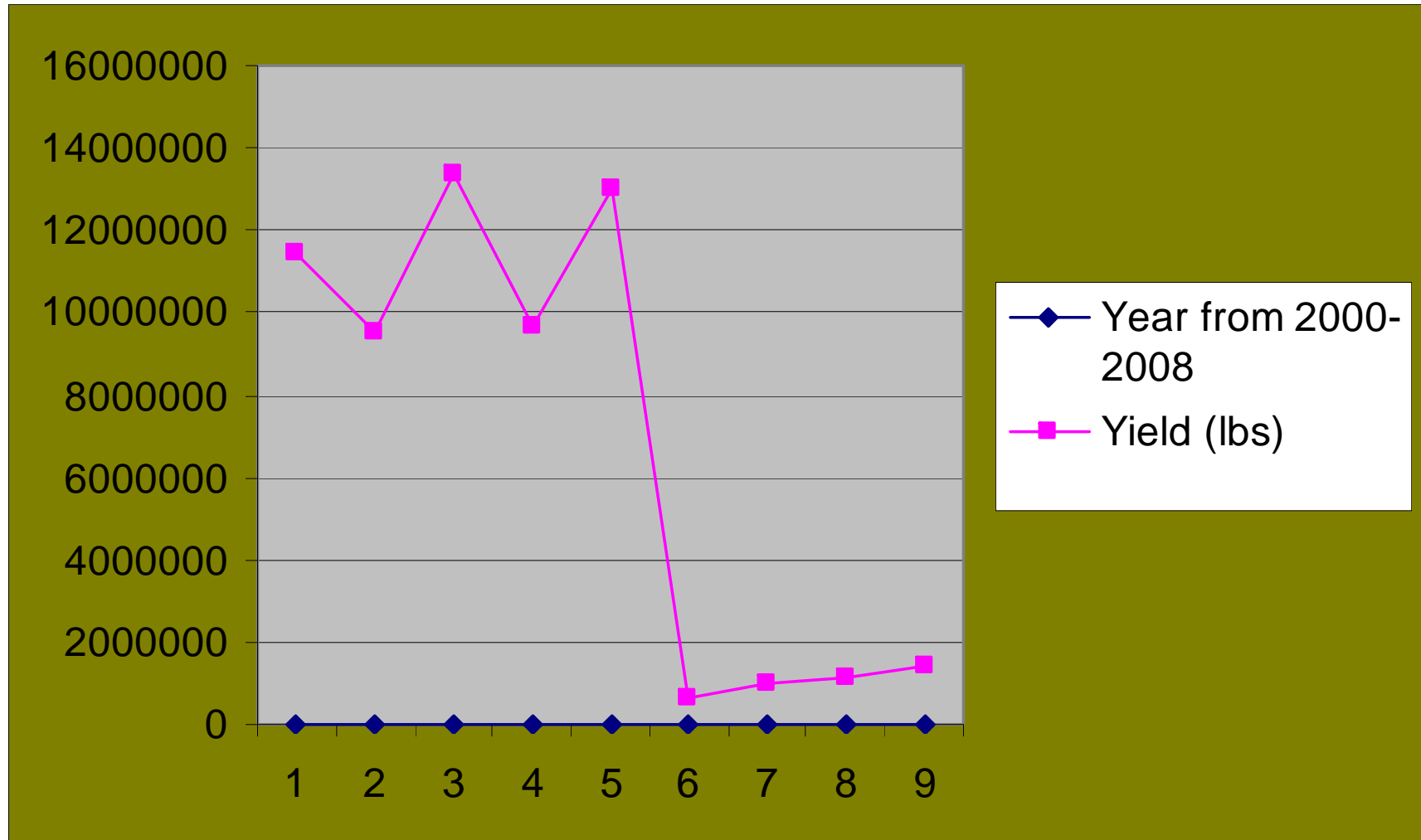
17 7:34AM

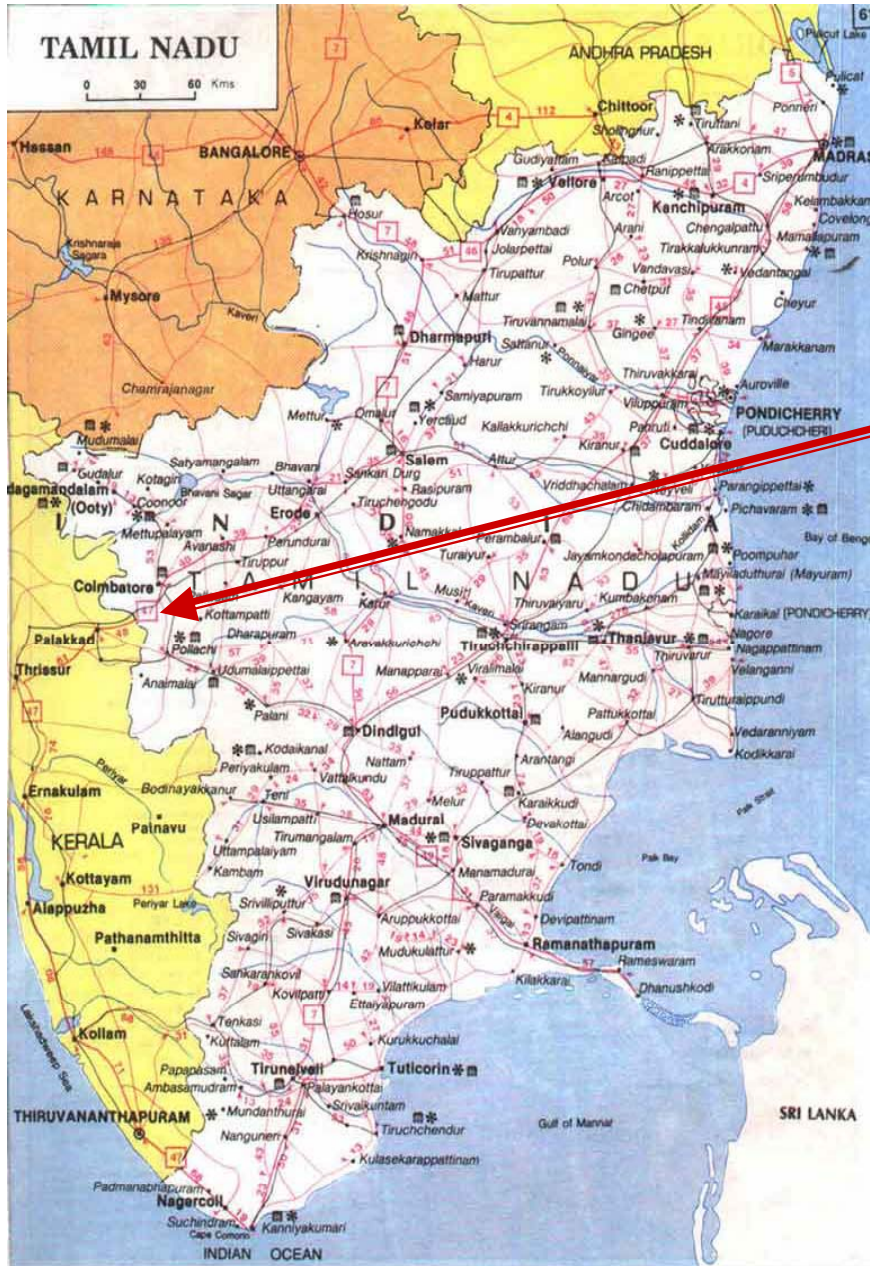


Nutmeg production in Grenada 2000-2008

Year	Production (lbs)
2000	11420566
2001	9534846.5
2002	13363738.5
2003	9690891.5
2004	12996144
2005	616589.5
2006	982132
2007	1132446.25
2008	1390635

Yield data of Grenada from 2000-2008





Tamil Nadu - Coconut
Total Area : 3.2 lakhs ha
Production : 3716 million nuts

Pollachi
Average Rain fall : 121.22 cm
Average annual rainy days : 44.5

RH : 70 %

Temperature	Mean Max	Mean min
Summer	34.7°C	22.1°C
Winter	32.2°C	9.2°C

Latitude : 10.39 N
Longitude : 77.03 E



Monocropped Coconut Plantation

Little space Big harvest!!

Optimize your space and maximize your yield

6 10:03AM



Coconut + Nutmeg + Cocoa

17 7:35AM



**38 years old coconut plantation with 24 years old nutmeg
Nutmeg- Seedling progeny**



Patch budded nutmeg tree



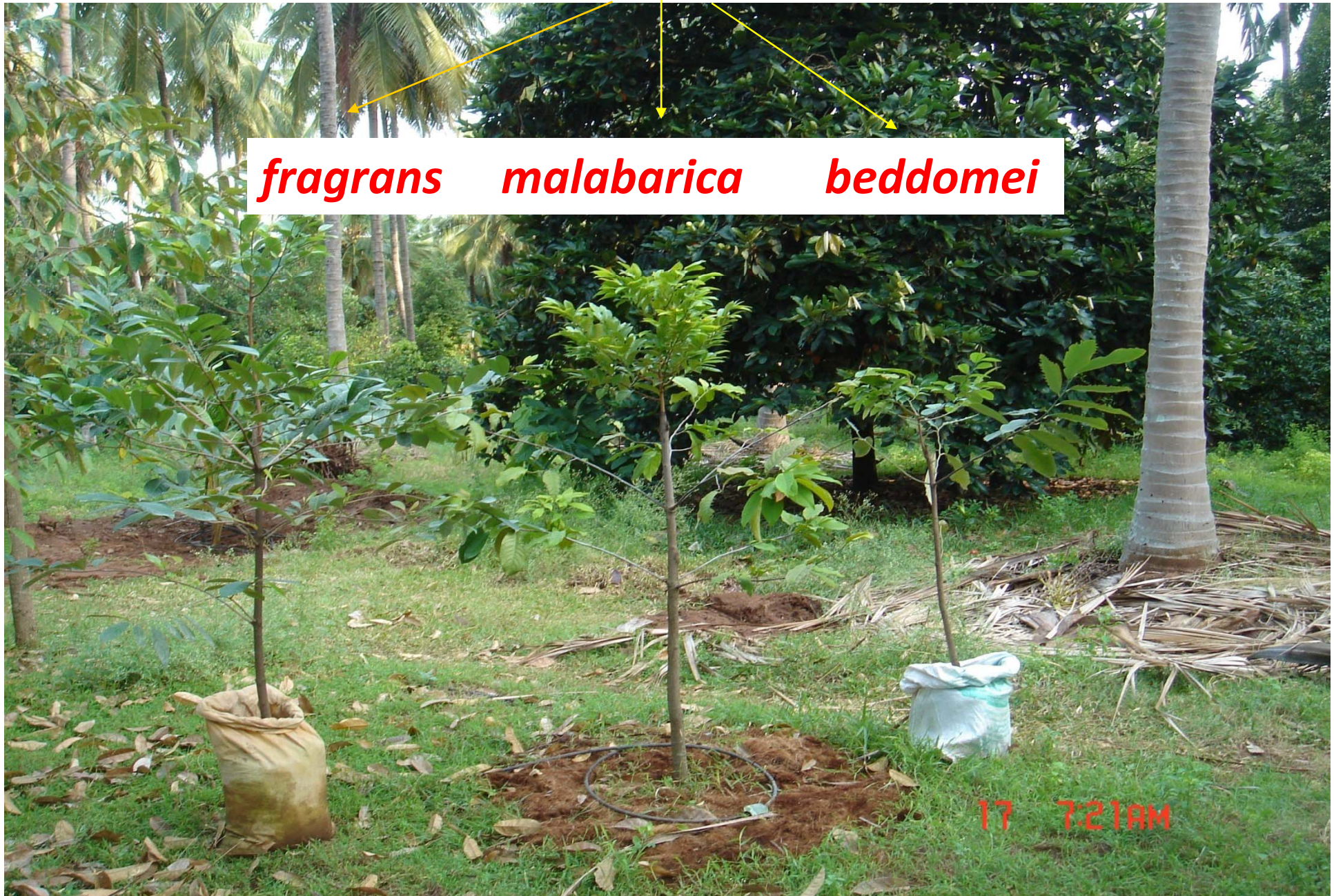
Myristica

fragrans

malabarica

beddomei

17 7:21AM



Established plant using *Malabarica*
wild root stock





Bud union tied with polythene strip



Beheaded rootstock after bud union

Sprouting of scion





3 Years Old budded plant with good Genetic Characters

Beheaded male plant

26 3:50PM









TOP WORKED PLANT WITH BETTER ROOT SYSTEM SHOWING GOOD PERFORMANCE



Top working on a Male tree

26 3:15PM





Top Working
Conversion of poor yielding Female tree into
a highly productive Tree

19 7:52 AM

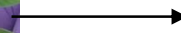


Well bearing branch – one step above bud union



Male shoot





Rootstock having male flowers

**Rootstock giving good yield
than its scion**





23 years old Plagiotropic tree

7:25AM



Untrained Epicotyl Grafted Plants – Canopy management is very essential



Varied pattern of plant growth due to use of Plagiotropic Scion



Grafted plant trained and supported with *Glyricidia*

4th year – 2009



5th year 2010



Drip - Fertigation - Mulch 17 7:26AM

Humic acid (10 lit/acre) - water soluble fertilizer



Profuse bearing leading to exhaustion



Exhausted tree showing die back





FOLIAR APPLICATION OF HUMIC ACID



Elite material of my plantation





Shade drying of nutmeg in Grenada

Nutmeg Pericarp Products





Nut-Med

Liquor Jelly Jam Syrup

Grenada



Nutmeg Leather Fruit
Indonesia





Cocoa intercrop in Coconut



Weed free – Organic mulch – Moisture conservation





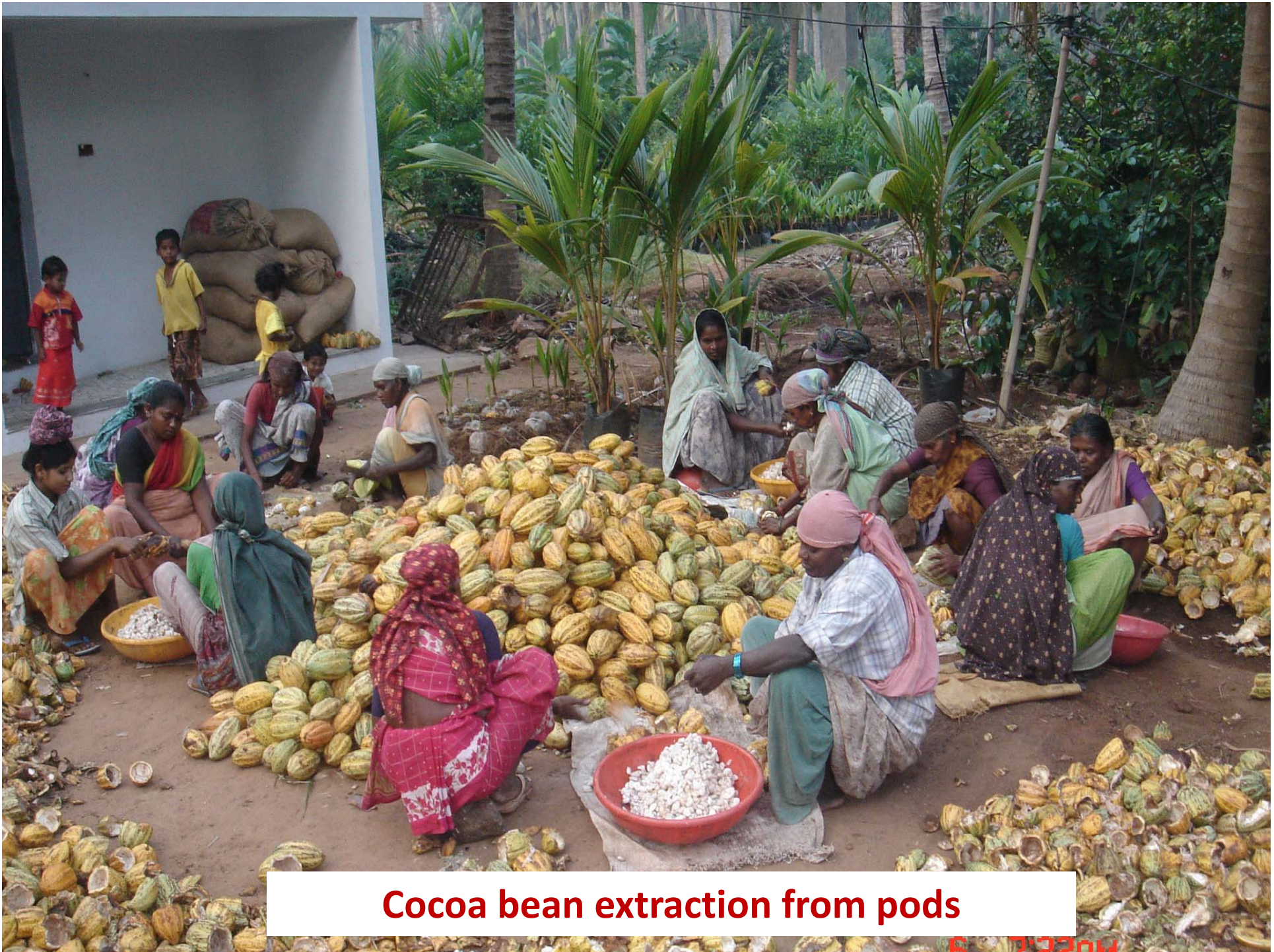
15 9:09AM



Coconut + cocoa + nutmeg – Improved soil fertility
Coconut+ nutmeg only – More weeds



32 months old cocoa F₁ hybrid from KAU



Cocoa bean extraction from pods





Coconut (COD) itself as an intercrop in coconut (Tall)

11:54AM







**NEW PLANTING – FOR COLLECTION
OF HEAD CABBAGE**



Queen of fruits (Mangosteen)
An ideal intercrop for coconut based cropping system -
Specific location





Mangosteen in bearing





Panniyur - 1



Bush Pepper

BIOCHAR

FOR ENVIRONMENTAL
MANAGEMENT

SCIENCE AND TECHNOLOGY

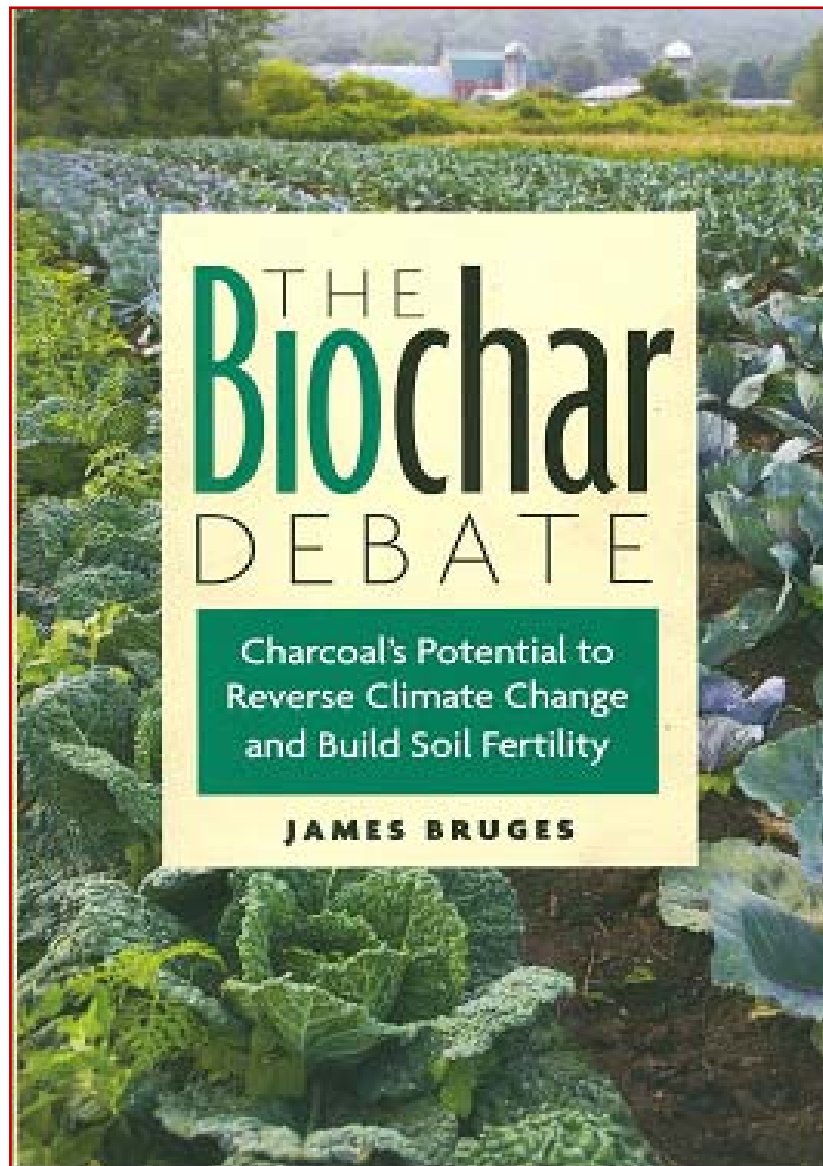


EDITED BY
JOHANNES LEHMANN
AND STEPHEN JOSEPH

THE Biochar DEBATE

Charcoal's Potential to
Reverse Climate Change
and Build Soil Fertility

JAMES BRUGES



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THIS IN 6 MONTHS

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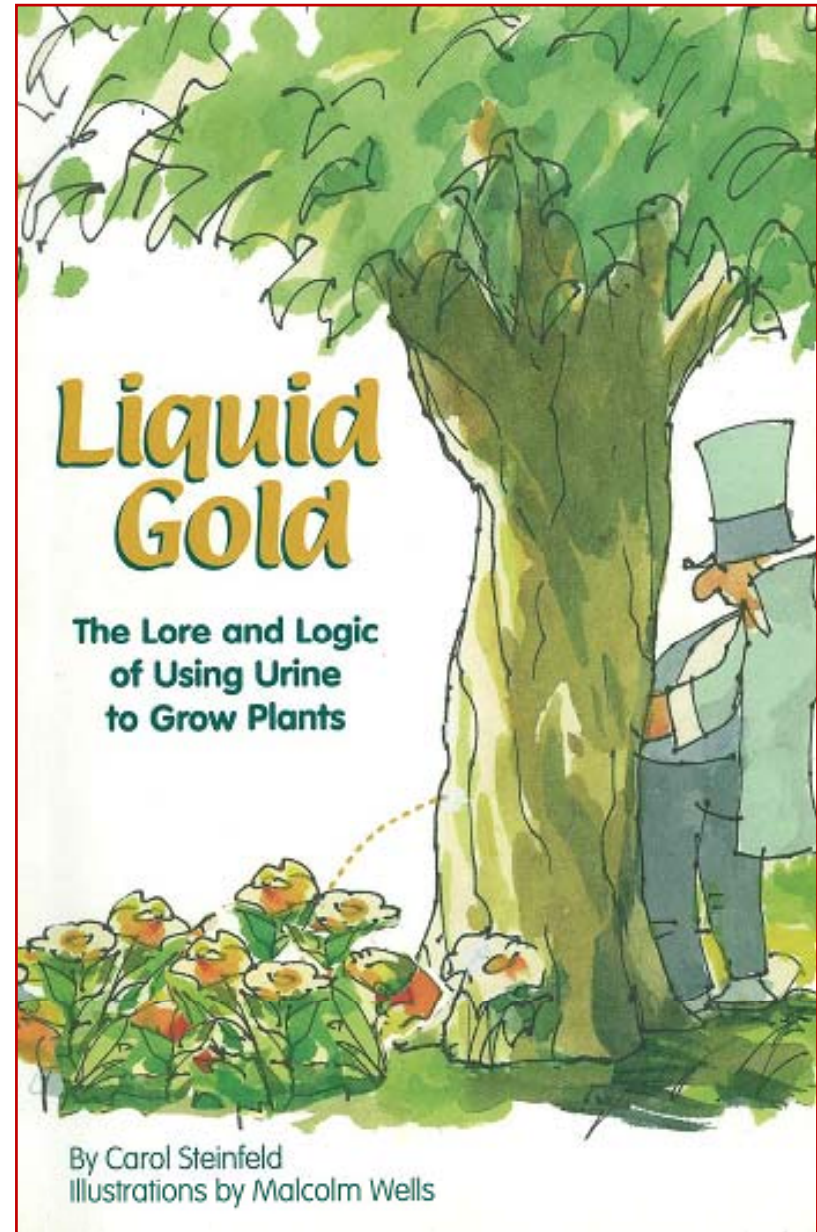
The Organic Gardener's Guide
to the Soil Food Web

REVISED EDITION



Jeff Lowenfels & Wayne Lewis

Foreword by Elaine Ingham



Liquid Gold

The Lore and Logic
of Using Urine
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By Carol Steinfeld
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It was not given to you by your parents

It was loaned to you by your children

African Proverb

- I gratefully acknowledge for the technical appraise and knowledge shared by the scientists of ICAR, Agricultural Universities, Institutions and my fellow farmers



My experiment with Nutmeg
An endless journey . 21. 7:11AM