Egypt

Sheta I., Eidsalem S., Fahmy H.

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Egypt

Project team

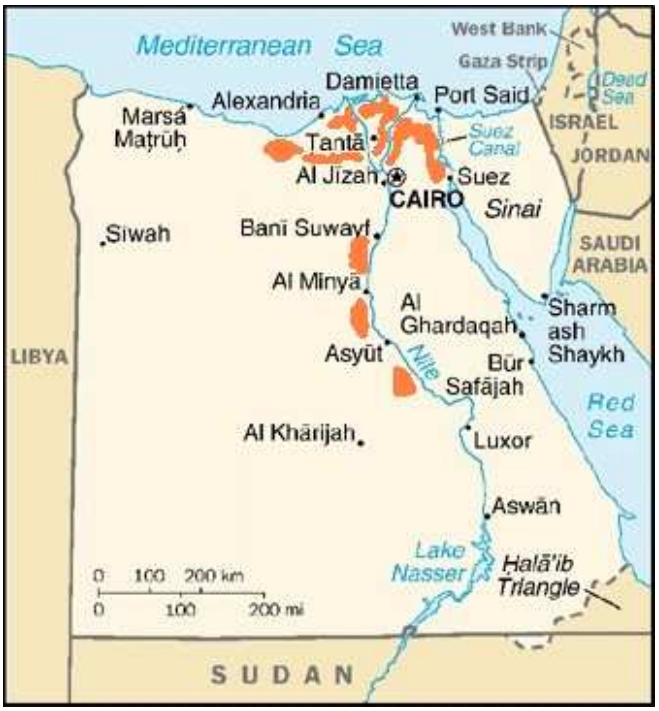
- Mr. I. SHETA, National Project Representative, Production Section, Ministry of Agriculture and Land Reclamation, Cairo
- Mr. S. EID SALEM, Horticultural Research Institute, MALR, Giza
- Mr. H. FAHMY, Foreign Relations, MALR, Cairo

Importance of citriculture

With a cultivation of 334.058 feddan and an annual production of 2.465.813 ton, citrus represents surely the most important fruit crop in Egypt in terms of history, land grown, local consumption and exportation. The main varieties are Valencia orange, local mandarin and lime, which are cultivated in the Delta and in the Desert areas on sour orange and Volkameriana lemon rootstocks, respectively.

Citrus groves are represented with trees of unknown varieties and sanitary status and the average productivity is very low, 7.38 ton/feddan. Most of the Governmental efforts are focusing on citrus improvement programmes with aim to increase production and fruit quality, meeting the citrus industry.

Citrus distribution map



Citrus varieties

Species/Varieties	Cultivated areas	Area *(Ha)*	Yield/Ha *(q)*
Sweet oranges	Sharkia, Behira, Kalubia, Monofia, Giza, Isamilia, Gharbia, Asuit and Beni Swif (Delta) Noubaria (Desert), Fayoum		
• *Common*		12969	176.14
• *Navel*		51470	180.50
• *Blood*		17	159.10
• *Sour ranges*		864	385.20
• *Acidless*		5213	229.40
Mandarins		33000	136.36
Lemons		15000	186.21
Grapefruit		203	269.10
Limes		14179	196.60
Others		19354	168.00
		152269	

Citrus phytosanitary problems

Pathogens		Diseases		References
Virus and virus-like				
CVV	X	Inf. variegation/Crinkly leaf	X	Fahmy, 2000
CiLRV		Leaf rugose		
CPsV	X	Psorosis	X	Nuor-Eldin, 1959; Bové, 1995; Fahmy, 2000
SDV		Satsuma dwarf		
CTLV		Tatterleaf/Citrange stunt		
CTV		Tristeza		
CVEV		Vein enation/Woody gall	X	
		Concave gum	X	Nuor-Eldin, 1959; Bové, 1995; Fahmy, 2000)
		Cristacortis		Bové, 1995
		Impietratura		
CEVd	X	Exocortis	X	Bové, 1995; Fahmy, 2000
CCaVd	X	Cachexia	X	Nuor-Eldin, 1959; Bové, 1995; Fahmy, 2000
CVds	X	Citrus viroids	X	Fahmy, 2000
		Chlorotic dwarf disease		
		Gummy bark	X	Nuor-Eldin, 1959; Childs *et al*, 1968
Fungus				
Phytophtora sp		Phytophtora gummosis	X	
Fusarium sp, Roselinia sp		Root rot		
Phoma tracheiphila		Mal secco		
Bacteria and Bacteria-like				
Pseudomonas syringae	X	Blast and Black pit		
X. axonopodis pv citri		Citrus canker		
Candidatus L. asiaticus		Greening		
Candidatus L. africanum				
Nematodes				
Tylenchulus semipenetrans	X		X	Nuor-Eldin, 1959; El-Morshedy, 1980, 1995
Pratylenchus vulnus				
Phytoplasmas				
Spiroplasma citri	X	Stubborn		Fahmy, 2000
		Witches' broom		

X= *present in the country*

Citrus germplasm

Location	Date of creation	N° of accessions*	Characterization		
			morphological	trueness-to-type	sanitary
National					
Horticultural Research Institute, MALR, Giza		67	X	X	partial
Kanater		85	X	X	partial
Korashia		52	X	X	partial

Citrus germplasm list

Varieties/Species
Oranges
Common
Balady
Hamlin
Jaffa
Shamouti
Person Brown
Pineapple
Roja
Salustiana
Vesido
Common dolce
Royal
Tempi
Youssef Soliman (local)
Balady few seeded (local)
Tanarrif
Yellow Banaty
White khalily
Rounded Jaffa
Navel
Washington
Navel 1-13 (local-nucellar)
Robertson
Thomson
Carter
Golden Nugget
Parent
Skaggs Bonanza
Frost
Lane late
Valencia
Valencia
Indian
Australian
Hart of Florida
Lue Gim Gnog
Californian
Valencia 10
Valencia 123
Nucellar (local)
Cutter nucellar.
Succari or Sugar
Dennis
Baiady
Tunissian.
Pigmented
Egyptian Blood
Red Khalily
Sanguina Oval
Mandarins and mandarin - like
Balady (local)
Abd El-Razik (local),
Sonbol (local)
King
Ponkan
Dancy
Clementine
Kinnow
Kara
Fremont
Minneola
Lime
Balady
Rashidy (local)
Mexican
Tahitian
Persian
Sweet lime
Mistikawi
Balady
Palestine
Iraq
Wahy
Grapefruit
March seedless
Foster
Thompson
Duncan
Ruby Red
Star Ruby Red.
Shaddock
Red
White
Spring
Lemon
Eureka
Lisbon
Villafranca
Kumquat
Oval and
Round
Citrus Rootstocks
Sour orange
Balady (local)
Sweet
Thornless
Brazilian
Russian
Spanish
Volkameriana lemon
Cleopatra mandarin
Rangpur lime
Rough lemon
Troyer citrange
Carizo citrange
Swingle citrumeio
Macrophlia or Alemow
Poorman's orange

Citrus programmes

Programmes	Proposed	Running	Legislation
Clonal and sanitary selection	Egyptian-German Citrus Improvement program	1999	
Monitoring, eradication and control of quarantine pests			National law
Certification	Egyptian-German Citrus Improvement program	1999	
Quarantine			National law
Others	- National program for increasing productivity of citrus trees - Integrated pest management	1990	

Public and private institutions working in citrus

Institutions or others	Location	Type of activity	Personnel		Facilities
			Number	Qualifications	
Public					
Horticulture Research Institute	Giza	Research Extension Training	45	PhD., Msc, Bsc	Labs, Experimental orchards.
Plant Path. Inst.	Giza	Research Extension Training	22	PhD., Msc, Bsc	Labs, greenhouse
Plant Port. Inst.	Giza	Research Extension Training	28	PhD., Msc, Bsc	Labs, greenhouse
Central Adm. for Horticulture	Giza	Extension		Bsc	
Horticulture Services Unit	Giza and other Governorates	Production		Bsc	Open nurseries and greenhouse
National Res. Center	Dokki	Research Extension	8	PhD., Msc, Bsc	Labs
Private					
Packing station	Different Governorates	Packing fruits			Packing house

Agreement

Official country agreement to the project on "Improvement of the citrus sector by setting up common conservation strategies for the free exchange of healthy citrus plant genetic resources"

ARAB REPUPLIC OF EGYPT
MINISTRY OF AGRICULTURE
MINISTER'S OFFICE

Dr. Cosimo Lacirignola.
Director of IAMB.
Bary- Italy.

Subject: Project Proposal on "Improvement of the citrus sector in the Mediterranean by the setting up of common conservation strategies for the free exchange of healthy citrus genetic resources ".

Dear Dr. Cosimo Lacirignola:

Following the outputs of Algeria meeting in October 2000 of the Mediterranean Network on Certification of Citrus (MNCC) and the Mediterranean Citrus Network (MECINET), Egypt is willing to join the project proposal on Improvement of the citrus sector in the Mediterranean by the setting up of common conservation strategies for the free exchange of healthy citrus genetic resources".

To this aim Eng. Ebrahim Sheta, Head of Agricultural Production Sector, Ministry of Agriculture and Land Reclamation will represent Egypt within the proposed project.

Please accept my best regards .

Cordially Yours

Dr. Youssuf Wally
Deputy Prime Minister
and Minister of Agriculture
and Land Reclamation.