



Pesticide Management in Egypt

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I- Egyptian Agriculture

- * Egypt is Known as one of the oldest agriculture civilizations.**
- * For over 5000 years, the Egyptian farmers created a civilization based on the Union of land and the River Nile .**
- * Egypt has no effective rain fall except in a narrow band along the Northern coast.**
- * Egypt has only the Nile as one main source of water supply.**

- * Water sharing from Basin is about 55.5 billion m³ per annum.**
- * Egypt is a transcontinental country spanning the North East corner of Africa and Southeast corner of Asia.**
- * Egyptian agriculture is almost entirely depended on irrigation.**
- * More than 90% of Egypt is desert .**
- * The agricultural land is about 3.5 million hectare, represent 3.5% of the total area.**

- * Egyptian produced area reached 15 million Fadden (6.25 million hectare).**
- * The agriculture production recorded nearly 35 billion U.S. Dollar.**
- * Egypt is one of the most populous countries in Africa and Middle East and the 15th most populated in the world.**

Top 15 Food crop and their world rank.

Food Crop	Production million/ton	World Rank
Sugar Cane	16.500	16
Sugar beet	9.126	9
Wheat	8.795	17
Tomatoes	8.625	4
Rice	5.911	15
Potatoes	4.219	15
Oranges	2.786	7
Onion	2.080	6

Food Crop	Production million/ton	World Rank
Watermelon	1.874	5
Bananas	1.129	18
Dates	1.4700	1
Grapes	1.379	13
Garlic	0.242	5
Strawberries	0.309	4
Peas green	0.234	6

II- Pesticide Situation in Egypt

- * Pesticides are used to enhance agricultural production and reduce pests.**
- * There is a risk that undesirable side effect on the environment and human health may occurred.**
- * Egypt consumed about 10600 metric ton of pesticides (Active ingredient) during 2016 which represent 0.2% of the global consumption (5 million metric tons of a value of 52 billion dollars).**

- * Safe use of pesticides was carried out by the Ministry of Agriculture supported by Scientific institutions in Egypt, especially in the last 50 years.**
- * Reports indicated that the pesticide use in agriculture increased until the early 1980's, coinciding with the growth and intensification in crop acreage and a large share of crop areas receiving pesticide treatment.**

- * Since 1982 peak in the quantity of pesticide active ingredients used by farmers has fluctuated between 15 and 30 thousand metric tons.**
- * The annual fluctuations have partially been in response to the government national strategies.**
- * Adoption of IPM programs with certain emphasis on using alternatives and the effect of newer products applied at lower rates than older products.**

- * Based on the Egyptian population (90 million) the rate of pesticide exposure per capita reached 117 gram/year.**
- * Number of registered pesticides based on trade name recorded 1159 from about 264 common name at 2016.**
- * There is no such thing as “completely” or “absolutely” safe pesticide.**

- * Pesticides are not blindly safe.**
- * Cost / Benefit analysis is always a must.**
- * Management and Regulation are key tools.**
- * Registration is only a first step.**

**III- Agricultural Pesticide
Committee (APC).**

APC

The Agricultural Pesticide Committee (APC) is the Egyptian governance accountable for the assessment, evaluation and registration of agricultural pesticides, and for their regulation up to and including the point of retail use.

- **APC Committee is mandated by the Egyptian Agricultural Law, No. 53 in 1966.**
- **APC members are appointed by a Ministerial decree, No. 1018 in 19/11/2015.**

Regulation of Pesticides in Egypt

- * By Law, the Agricultural Pesticide Committee (APC) is the only agency that exercises the authority and the responsibility of agricultural pesticide management and regulation in Egypt.**

APC Role

1-The Role of APC is to independently evaluate the efficacy, safety and performance of pesticides intended for use in the Egyptian agro-ecosystem, ensuring that the health, safety, environment and trade well be protected

2-APC is responsible for tailoring, administering and managing the National Registration Schemes and Decrees for agricultural pesticides, which set out the regulatory framework for managing pesticides production, import and use in Egypt.

APC Mission

- * To assure that agricultural pesticides are used when needed and when needed they are managed and regulated by policies, procedures and practices that ensure their effectiveness on target pests and their safety on public health and environment.**

Procedures of Registration

Approving of
preliminary Technical
data File
(1)

Reviewing and
approving the trial
program
(2)

Registration
certificate is issued
and valid for six
years
(6)

Pesticide dossier (File)
is judged by highly
qualified experts
(5)

Pesticide is Experimented for
two years as the article no.
of the Ministerial Decree No.
1018 of 2013
(3)

Agric. Pesticide central
laboratory approved the
physical and chemical
properties as well as active
ingredient of the product and
associated impurities
(4)

DUTIES OF APC

- 1- Issue registration certificate and product label upon examining the registration file, bioassay trials, physical and chemical analysis of the product.**
- 2-Regulate all the procedures, required to make the product available.**

3-Approve quantity of registered products to be imported based on the estimated needs either for private or public sector.

4- Reduce the red label products by 5% of the average mean of the last three years.

APC Achievements during 2016

1-Rebuilding the administrative system of APC.

**2-Reviewing the registered pesticides based on
the international references**

**3-Issued scientific document for agricultural
pesticide recommendations.**

- 4- Conducted a case study project in relation to pesticide counterfeit in Egypt.**
- 5- Establish a visit programs of the Egyptian Pesticide companies**
- 6- Enhance the cooperation between APC and other international references.**
- 7- Solving many problems facing pesticide stalkholders.**

8-Implement many training programs directed to Agric. Extension Workers, retail shop personnel, and farmers.

9- Modernize the electronic portal of APC.

10- Use Quick Response Code on label for tracing pesticide counterfeit.

11-Issue three documents for training program of traders, applicators and company labors.

APC Future guidelines

- 1- Strength the Pesticide surveillance system.**
- 2- Correlate the approval of pesticide residues in and on food and feed commodities for export and national consumers.**
- 3- Issued national code of conduct on registration, handling and use of pesticides**

4-Continuous reviewing of the situation of pesticides in International references.

5-Scheduled and implement a visit program for national pesticide companies.

6- Harmonize the registration procedures with the Arabic countries.

IV-Pesticide Consumption in Egypt.

Table (1)
The amount of pesticides
(based on the type of pest) used in Egypt
during 2012-2016 (metric ton active ingredients)

Year	Insecticides	Fungicides	Herbicides	Total
2012	2548.6	3737.5	1467.4	7651.5
2013	2904.3	3463.8	1835.4	8202.9
2014	2589.6	4674.9	1286.6	8551.1
2015	3422.35	5111.14	1812.92	10346.79
2016	2008.87	5503.05	2453.86	9965.79
Mean	2694.744	4497.958	1771.244	8943.548

- **Slight increase in the pesticide consumption was recorded annually**
- **Fungicides rank first followed by insecticides**

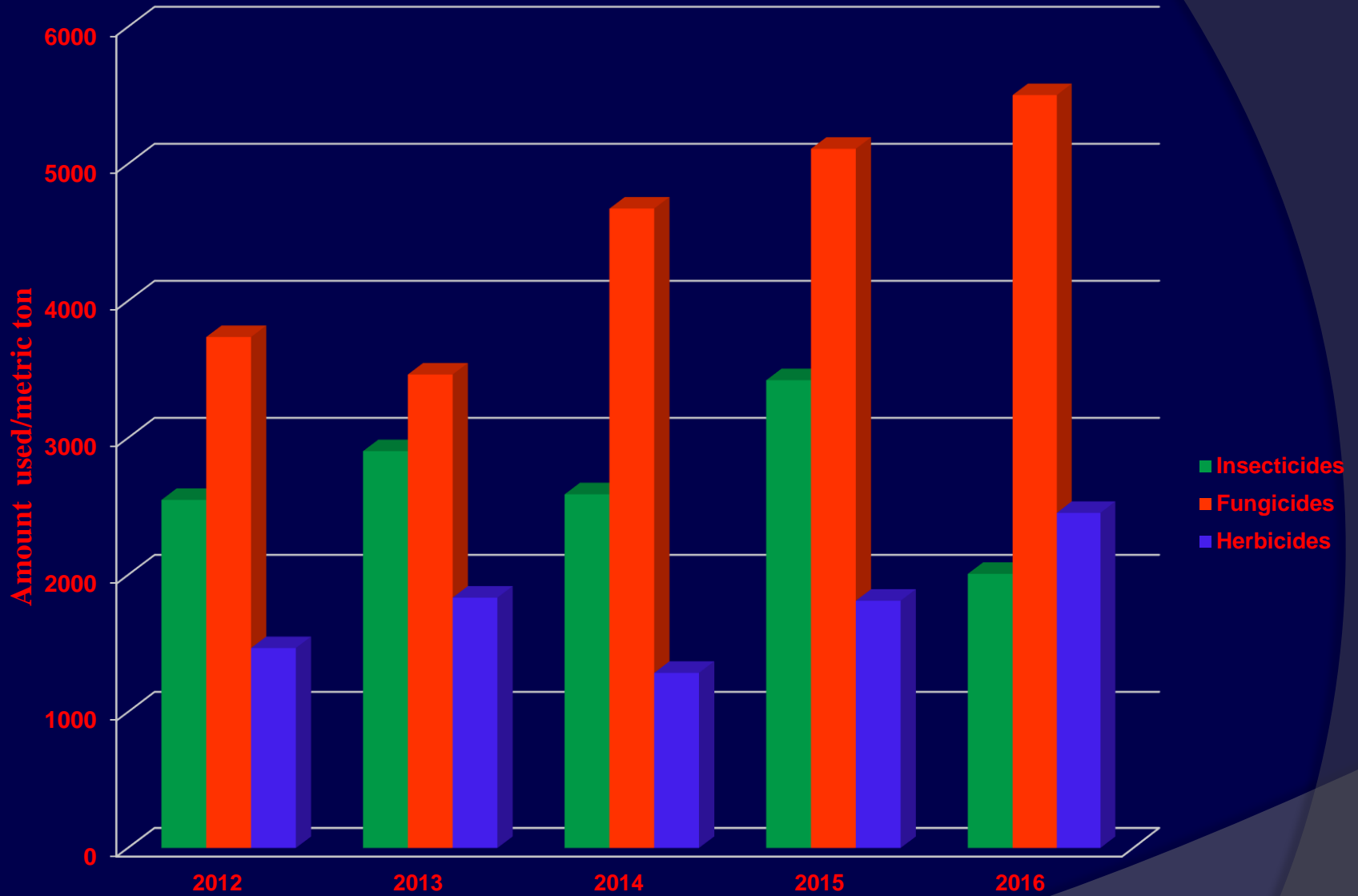


Fig (1):The amount of pesticides used in Egypt during 2012-2016

Table (2)
The amount of pesticides Consumed
(based on the label colour)
in Egypt during 2012-2016
(metric ton A.I)

Year	Red Label	Yellow Label	Blue Label	Green Label	Total
2012	352.91	2457.9	1467.4	3373.3	7651.5
2013	419.61	2658.1	826.7	4298.5	8202.9
2014	319.71	2354.4	1541.2	4335.8	8551.1
2015	499.29	2625.09	2213.58	5008.5	10346.5
2016	352.68	2908.98	3009.55	3694.58	9965.79
Mean	388.84	2600.894	1811.686	4182.136	8943.55

- **The green Label pesticides proved the first for consumption followed by yellow, blue and red label, respectively**

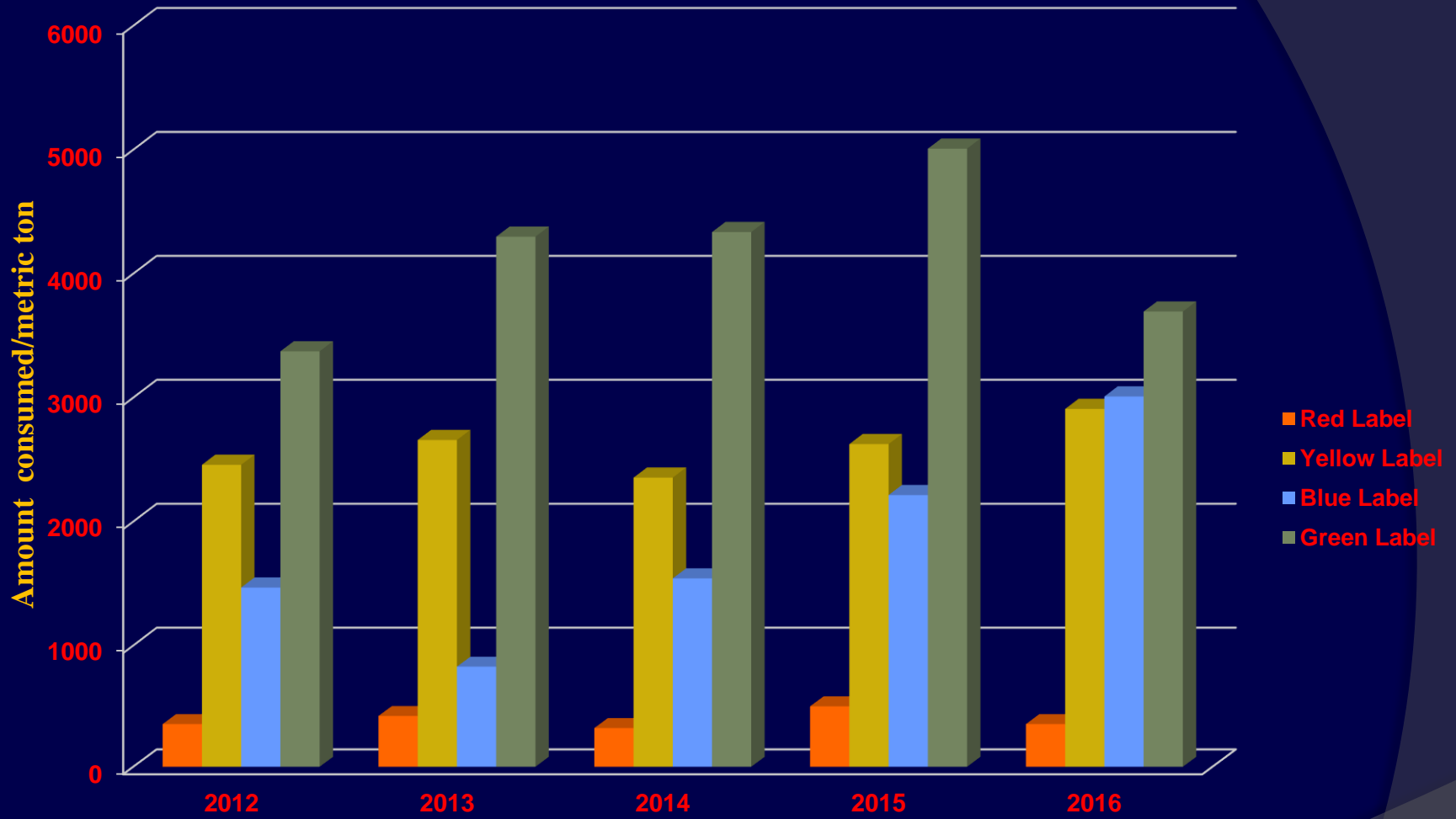


Fig (2):The amount of pesticides consumed in Egypt during 2012-2016

Table (3)
Number of used pesticides in Egypt
(Trade and common names) during
2012-2016

Year	Insecticides		Fungicides		Herbicides		Total	
	Trade name	Common name	Trade name	Common name	Trade name	Common name	Trade name	Common name
2012	227	72	246	76	93	51	566	199
2013	239	76	263	79	101	55	603	210
2014	297	85	357	82	121	58	775	225
2015	393	90	454	89	165	63	1012	242
2016	448	98	526	97	213	69	1187	264

- **Registered pesticides based on trade name reached 1187 at 2016 compared with 566 at 2012 .Based on common name it reached 264 at 2016 compared with 199 at 2012**

Table (4)
Label colors of registered agricultural
Pesticides in Egypt at 2016
(Based on Pesticides Formulation)

Label Colour	No. Common Name Pesticides	%
Red	6	2.27
Yellow	65	24.62
Blue	41	15.53
Green	152	57.58
Total	264	100

- **Red label pesticides represents not more than 2.27% from the total used in Egyptian agriculture**

Table (5)

Number of biocides and synthetic pesticides registered in Egypt

Pesticides	Synthetic pesticides	Biocides	Total
Insecticides	336	83	419
Fungicides	502	4	506
Herbicides	205	-	205
Total	1043	87	1130
%	92.31	7.69	----

- **Biocides represents about 7.69% from the total of pesticide used in Egypt**

Table (6)

Imported Agricultural pesticides during 2016 based on the country of origin

Country of origin	Ton Active/ingredient	% of Total
China	4502.63	43.96
India	2093.03	20.44
Germany	1171.41	11.44
Switzerland	1012.49	9.86
France	743.23	7.26
Japan	718.87	7.02

- **China ranked the 1st country for pesticide exportation reaching about 43-96%. from the total export followed by India and Germany**

Thank You

