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المؤشرات التنافسية لصادرات بذور الريحان في أهم الاسواق الخارجية

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بيانات البحث

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الطبية والعطرية

تعد النباتات الطبية والعطرية من الحاصلات غير التقليدية والتي يمكن ان تسهم في زيادة الحصة التصديرية للقطاع الزراعي المصري، لإمكانية التوسع في زراعتها لتوفر أراضي صالحة لإنتاج الكثير منه، وظهورها في مواسم تسويقية ملائمة للتصدير. ويعتبر محصول الريحان من المحاصيل العطرية التصديرية الواعدة، والتي تزايدت قيمة الصادرات منها في السنوات الاخيرة إلا أن زراعة تلك النباتات علي المستوي المحلي لم يحظي بالاهتمام الكافي مما أدى الي تذبذب المساحات المزروعة من النباتات الطبية والعطرية وتذبذب انتاجها، وهو ما أدى الي فقد بعض الاسواق الخارجية مما يؤثر على حصة الصادرات الزراعية المصرية ، ويهدف البحث الي دراسة المؤشرات التنافسية للريحان المصري في أهم اسواقه الاستيرادية ويتبين أن بولندا جاءت في المرتبة الأولى من حيث متوسط سعر طن التصدير من محصول بذور الريحان والتي قدرت بحوالي 3.63 الف دولار للطن خلال الفترة (2016-2020)، في حين جاءت إنجلترا وإيطاليا في المرتبة الثانية والثالثة بمتوسط بلغ نحو 3.11، 3.01 الف دولار للطن خلال نفس الفترة، وجاءت ألمانيا وروسيا في المرتبة الرابعة والخامسة بمتوسط سعر بلغ نحو 2.28 ، 2.22 الف دولار للطن على الترتيب، وجاءت فرنسا وكندا وأمريكا في المرتبة السادسة والسابعة والثامنة على الترتيب بمتوسط سعر بلغت نحو 1.75 ، 55.1 ، 1.64 الف دولار للطن على الترتيب، بينما بلغ متوسط سعر لباقي الدول 3.76 الف دولار.

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Competitive indicators of basil seed exports in the most important foreign markets

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ABSTRACT

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Medicinal and aromatic plants are among the non-traditional crops that can contribute to increasing the export proceeds of the Egyptian agricultural sector, due to the possibility of expanding its cultivation due to the availability of lands suitable for producing a lot of it, and its appearance in marketing seasons suitable for export. The basil crop is considered one of the promising aromatic export crops, of which the value of exports has increased in recent years. However, the cultivation of these plants at the local level did not receive sufficient attention, which led to the fluctuation of the cultivated areas of medicinal and aromatic plants and the fluctuation of their production, which led to the loss of some foreign markets. Which affects the outcome of Egyptian agricultural exports. The research aims to study the competitive indicators of Egyptian basil in its most important import markets. It turns out that Poland ranked first in terms of the average export price per ton of basil seed crop, which was estimated at about 3.63 thousand dollars per ton during the period (2016-2020). while England and Italy ranked second and third, with an average of about 3.11, 3.01 thousand dollars per ton during the same period, and Germany and Russia came in the fourth and fifth places, with an average price of about 2.28, 2.22 thousand dollars per ton, respectively, and France, Canada and America came in the rank Sixth, seventh and eighth, respectively, with an average price of about 1.75, 1.55, and 1.64 thousand dollars per ton, respectively, while the average price for the rest of the countries was 3.76 thousand dollars.

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Introduction:

The advancement of the Egyptian export sector is the main engine of the economic development process, as the outcome of exports contributes effectively to the financing of development plans, raising investment rates and providing more job opportunities, as every billion dollars contributes to providing 270 thousand jobs. As well as the situation of the agricultural sector, the diversity in agricultural exports, whether in traditional or non-traditional crops, is necessary, to achieve stability in the agricultural trade balance and increase the foreign exchange earnings necessary for Egypt in the development process.¹

Medicinal and aromatic plants are non-traditional crops that can contribute to increasing the export earnings of the Egyptian agricultural sector, due to the possibility of expanding their cultivation to provide land suitable for the production of a lot of it, and their appearance in marketing seasons suitable for export. Basil is one of the most promising export aromatic crops, from which the value of exports has increased in recent years.

Research problem:

Despite the economic importance of medicinal and aromatic plants in Egypt and their advantages that made them competitive in global markets, such as the suitability of climatic conditions for the production of these plants at early times for competing countries, and the demand for these plants is increasing day by day as a result of the global trend towards producing a safe medicine, in addition to absorbing a large sector of labor at the productive, manufacturing or commercial level, but the cultivation of these plants at the local level has not received sufficient attention, which It led to the fluctuation of the cultivated areas of medicinal and aromatic plants and the fluctuation of their production, which led to the loss of some foreign markets, which affects the earnings of Egyptian agricultural exports , The research attempts to maximize the benefit from basil seed exports and to open new markets.

Research Aims:

The main objective of the research is t studying the competitive indicators of Egyptian basil in its most important import markets, by achieving a set of objectives:

- 1- Studying the development of the current Egyptian production situation of the basil crop.
- 2- investigating the development of global and Egyptian exports of basil.
- 3- Estimating the competitiveness indicators of the basil crop.

Research method and data sources:

Research methods and data sources:

The research depends on the use of methods and methods of descriptive and quantitative economic statistical analysis to analyze the data related to the study, including the time trend and simple linear regression, in addition to some inticators used in measuring export

¹) Abdel Aziz, Shawky Amin Abdel Aziz, and others, (2008) An economic study of the production and - export of Egyptian medicinal and aromatic plants. The Egyptian Journal of Agricultural Economics .Volume Eighteen - Issue Three - September

competitiveness. The research is based on published and unpublished data issued by bodies such as the Central Administration for Agricultural Economy at the Ministry of Agriculture and Land Reclamation, the Council of Medicinal and Aromatic Plants Crops, the Central Agency for Public Mobilization and Statistics, the National Internet Network and the data and results of previous research and the available studies in the field of production, marketing and export of medicinal and aromatic plants.

The Research results:

First: The development of area, yield and production of green basil crop during the period from (2005-2020):

Evolution of the area of the green basil crop: of Table (1) shows with supplements that the area of the green basil crop during the study period ranged between a of about 4725 acres in 2005 and a of about 13910 acres in 2020 with annual average of about 7546.9 acres during the period (2005-2020).

the time trend of the area of the green basil crop, the results of the statistical estimate during the period (2005-2020) in Table (2) show that the area of the green basil crop took an increasing general trend of about 454.2 acres, and the statistical significance of the increase was proven, and the significance of the model as a whole was proven, and the results showed that about 66% of the changes in the area of the green basil crop are due to variables whose impact reflects the time factor.

Evolution of green basil production: Table (1) shows with supplements that the production of green basil during the study period ranged between a minimum of about 118942 tons in 2008 and a maximum of about 245547 tons in 2020 with an annual average of about 159296.9 tons during the period (2005-2020).

By studying the general temporal trend of the development of green basil production, the results of the statistical estimate during the period (2005-2020) in Table (2) show that the production of green basil crop is taking an increasing general trend of about 4643.9 tons, and the statistical significance of the increase has been proven, as well as the significance of the model as a whole, and the results showed that about 41% of the changes in the production of green basil crop are due to variables whose impact reflects the time factor.

Table (2) Equations of the time trend for the area, productivity and production of the green basil crop during the period (2005-2020)

variable	temporal equation	R2	F
The area is in acres	$Y = 8337.3 + 263.03X_i$ (6.7) ** (2.05) **	0.66	26.5
Productivity in tons / feddan	$Y = 27.1 - 0.61 X_i$ (36.2) ** (-7.8) **	0.81	61.1
Ton production	$Y = 119823.7 + 4643.9 X_i$ (8.3) ** (3.1) **	0.41	9.7

where: Y = estimated value of the area, production and productivity of the green basil

X_i = time variable where i (1, 2, 3, '16) .

The value in parentheses indicates the calculated value of T)) . (R2) Selection

(*) indicates the significance of the regression coefficient at the level of 0.05.

Source: Collected and calculated from the data of Table 1.

The development of Egyptian exports of basil:

Evolution of the quantity of Egyptian exports of basil: Table (3) shows with supplements the evolution of the quantity of Egyptian exports of basil in tons during the period (2005-2020), and it is clear that the amount of exports reached its lowest in 2012 by about 6.54 tons, while it reached its maximum in 2016, estimated at about 25.35 tons, and the average .for the period was about 15.45 tons

By studying the directional relationship of the quantity of Egyptian exports of basil per ton during the period (2005-2020), it is clear from Table (4) that the amount of exports of basil increases by about 0.99 tons annually during the study period, where the morale of the increase has been proven, as well as the significance of the model as a whole, and the results show that about 52% of the changes in the quantity of Egyptian exports of basil are due to a .group of factors whose impact reflects the variable of time

Evolution of the value of Egyptian exports of basil: Table (3) shows with supplements the evolution of the value of Egyptian exports of basil in thousand dollars during the period (2005-2020), and it is noted that the average value of exports reached its lowest in 2010 by about 10465.90 thousand dollars, while it reached its maximum in 2016, where it was estimated at about 37507.77 thousand dollars, and the average for the period was about 20928.0 thousand dollars.

By studying the directional relationship of the value of Egyptian exports of basil in thousand dollars during the period (2005-2020), it was shown from Table (4) that the value of Egyptian exports of basil increases by about 1113.7 thousand dollars annually during the study period, where the morale of the increase was proven, as was the significance of the model as a whole, and the results show that about 39% of the changes in the value of Egyptian exports of basil are due to a group of factors whose impact reflects the variable of time.

The evolution of the price of Egyptian exports of basil: Table (3) shows with supplements the evolution of the price of Egyptian exports of basil in thousand dollars per ton during the period (2005-2020), from which it was found that the average price of Egyptian exports reached the lowest in 2020 by about 943.84 thousand dollars tons, while it reached its maximum in 2012, where it was estimated at about 2014.22 thousand dollars per ton, and the average for the period was about 1409.25 thousand dollars per ton.

By studying the directional relationship of the price of Egyptian exports of basil during the period (2005-2020), it was found from Table (4) that the price of Egyptian exports of basil decreases by about 10.6 thousand dollars per ton annually during the study period, and the significance of the decrease was not proven, as was the significance of the model as a whole, and there is no mathematical picture suitable for the nature of the data and that the data revolves around its arithmetic average.

,Table (4): Equations for the general time trend of the development of the quantity value and price of exports

variable	estimated model	R2 -	F
The amount of Egyptian sahara	$\hat{Y} = 6.9 + 0.99 X$ (2.8) (3.9)*	0.52	15.37
The value of Egyptian exports	$\hat{Y} = 11461.3 + 1113.7 X$ (3.2) (3.01)*	0.39	9.03

Where :

Y = the estimated value of the quantity, value and price of Egyptian basil sachets.

X = time variable where (1, 2, 3,, 16).

The value in brackets indicates the calculated (T) value, (R2) the coefficient of determination, and (F) the significance of the model as a whole.

(*) indicates the significance of the regression coefficient at the significance level of 0.05.

() indicates that the regression coefficient is not significant.

Source: calculated from the data of Table (3).

Geographical distribution of the quantity, value and price of Egypt's exports of basil seed crop:

Geographical distribution of the quantity of Egypt's exports of basil seeds: By reviewing the data of Table (5) on the development of the quantity of Egypt's exports of basil seeds, it is clear that America ranks first in terms of average quantity, which was estimated at about 3395.93 tons and with a relative importance of about 65.98% during the period (2016-2020). Germany came in second place with an average of about 435.10 tons and a relative importance of 8.45%, then Poland and Canada ranked third and fourth with an average quantity of 218.44, 203.27 tons and a relative importance of about 4.24%, 3.95% respectively during the same period. France, Russia and Italy came in fifth, sixth and seventh place with an average quantity of about 100.05, 71.15, 60.49 tons and a relative importance of about 1.94%, 1.38%, 1.18%, respectively, and England came in eighth place respectively with an average quantity of about 34.29 tons with a relative importance of about 0.67%, respectively, while the average quantity for the rest of the countries was 628.55 tons with a relative importance of about 12.21%.

Table (5) The relative importance of the quantity of Egypt's exports of basil seeds to countries of the world, in tons, during the period (2016-2020)

the years	2016	2017	2018	2019	2020	average	%
America	3269.07	3332.5	3395.93	3459.35	3522.78	3395.93	65.98
Germany	446.11	441.2	433.55	430.08	424.55	435.1	8.45
Poland	187.03	202.73	218.44	234.14	249.85	218.44	4.24
Canada	145.77	189.76	202.47	226.94	251.42	203.27	3.95
France	100.92	102.03	102.68	104.31	90.29	100.05	1.94
Russia	84.18	77.66	71.15	64.64	58.13	71.15	1.38
Italia	55.68	60.38	56.9	62.03	67.46	60.49	1.18
England	30.85	32.57	34.29	36	37.72	34.29	0.67
Rest of the world	775.44	349.04	593.83	590.17	834.27	628.55	12.21
the scientist	5095.06	4787.89	5109.23	5207.68	5536.46	5147.26	100

www.treadmap.org sources:

Geographical distribution of the value of Egypt's exports of basil seed crop: By reviewing the data of Table (6), America comes in first place in terms of average value, which was estimated at about 5198.0 thousand dollars and a relative importance of about 58.57% during the period (2016-2020), while Germany and Canada came in second and third place with an average of about 989.0, 319.0 thousand dollars, with a relative importance of about 9.50%, 4.11%,

respectively during the same period, and France and Poland came in fourth and fifth place with an average value of About 352.0, 362.0 thousand dollars and a relative importance of about 3.57%, 2.58%, respectively, and Russia, Italy and England came in sixth, seventh and eighth place respectively with an average value of about 160.0, 183.0, 107.0 thousand dollars with a relative importance of about 1.82%, 1.74%, 1.0%, respectively, while the average value of the rest of the countries was 2071.0 thousand dollars with a relative importance of about 17.10%.

Table (6) The relative importance of the value of Egypt's exports of basil seeds to world countries in thousands of dollars during the period (2016-2020)

the years	2016	2017	2018	2019	2020	average	%
America	5966	7349	3689	4678	4311	5198	58.57
Germany	949	876	969	1044	1109	989	9.5
Canada	543	471	250	213	116	319	4.11
France	300	275	404	379	400	352	3.57
Poland	433	526	130	349	370	362	2.58
Russia	203	183	174	134	105	160	1.82
Italia	140	137	209	205	223	183	1.74
England	98	65	146	113	113	107	1
Rest of the world	974	2474	2077	2326	2506	2071	17.1
the scientist	9606	12356	8048	9438	9255	9741	100

www.treadmap.org sources:

The average price of Egypt's exports of basil seed crop: By reviewing the data of Table (7), it is clear that Poland ranked first in terms of the average export price of basil seeds crop, which was estimated at about 3.63 thousand dollars per ton during the period (2016-2020), while England and Italy came in second and third place with an average of about 3.11, 3.01 thousand dollars per ton during the same period, and Germany and Russia came in fourth and fifth place with an average price of about 2.28, 2.22 thousand Dollars per ton, respectively, France, Canada and America came in sixth, seventh and eighth place respectively with an average price of about 1.75, 1.55 and 1.64 thousand dollars per ton, respectively, while the average price for the rest of the countries was 3.76 thousand dollars.

Table (7) the relative importance of the price of Egypt's exports of basil seeds to the countries of the world in thousands of dollars per ton During the period (2016-2020)

the years	2016	2017	2018	2019	2020	Average
Poland	4.29	5.16	1.27	3.34	4.1	3.63
England	3.18	2	4.26	3.13	3.01	3.11
Italia	2.51	2.27	3.67	3.3	3.31	3.01
Germany	2.13	1.99	2.24	2.43	2.61	2.28
Russia	2.41	2.36	2.45	2.07	1.81	2.22
France	2.06	1.45	2	1.67	1.59	1.75
Canada	2.9	2.32	1.14	0.91	0.47	1.55
America	1.83	2.21	1.09	1.35	1.22	1.54
Rest of the world	1.26	7.09	3.5	3.94	3	3.76
the scientist	1.89	2.58	1.58	1.81	1.67	1.91

www.treadmap.org source:

From the above, it is clear that America is the largest importer of Egyptian basil seeds, as it imports more than 65% in terms of the Egyptian exported quantity of basil seeds, 58% in terms of value. Poland, England, Italy and more than two thousand dollars from Germany and Russia, which requires studying the reasons for this high price and working to develop exports to those countries as well as the reasons for the low export price of America.

Geographical distribution of the quantity, value and price of US imports of basil seed crop:

Geographical distribution of the quantity of US imports of basil seed crop: By reviewing the data of Table (8), it is clear that Egypt comes in first place in terms of average quantity, which was estimated at about 3395.93 tons and a relative importance of about 34.94% during the period (2016-2020), while Mexico and Colombia came in second and third place with an average of about 2933.7, 2305.0 tons with a relative importance of about 30.19% and 23.72% respectively during the same period, then Peru and Israel ranked fourth and fifth with an average quantity of About 184.3, 109.6 tons with a relative importance of about 1.90%, 1.13%, respectively, Spain, Germany and India came in sixth, seventh and eighth place respectively with an average quantity of about 87.3, 35.9, 30.6 tons with a relative importance of about 0.90%, 0.37%, 0.31%, respectively, while the average quantity for the rest of the countries was 163.7 tons with a relative importance of about 1.68%.

Table (8) the relative importance of the amount of US imports of basil seeds to the countries of the world in tons during the period (2016-2020)

the years	2016	2017	2018	2019	2020	average	%
Egypt	3269.1	3332.5	3395.9	3459.4	3522.8	3395.9	34.94
Mexico	2916.5	2924.3	2917.1	3223.8	2686.7	2933.7	30.19
Colombia	2012.3	2303.2	2365.6	2270.8	2573	2305	23.72
Peru	330.2	241.1	231.8	112.6	5.9	184.3	1.9
Israel	158.7	138.3	125.2	70.8	55.1	109.6	1.13
Spain	106.2	124.5	75.8	62.7	67.6	87.3	0.9
Germany	13.5	16.8	12.1	10	126.9	35.9	0.37
India	14.8	42.1	21.3	20.8	54.2	30.6	0.31
Remainder Countries of the world	63.9	93.1	341.9	171.5	148.1	163.7	1.68
Scientist	9062	9770.6	9923.2	9835.9	10001.2	9718.6	100

www.treadmap.org source:

Geographical distribution of the value of US imports of basil seed crop: By reviewing the data of Table (9), it is clear that Mexico comes in first place in terms of average value, which was estimated at about 14536.0 thousand dollars and a relative importance of about 33.81% during the period (2016-2020), while Colombia came in second place with an average of about 10559.0 thousand dollars with a relative importance of about 24.56% during the same period, and Egypt comes third with an average of 5199.0 thousand dollars with a relative importance of about 12.09% during the same period. Germany and Israel came in fourth and fifth place with an average value of about 1552.0, 1152.0 thousand dollars and a relative importance of about 3.61%, 2.68%, respectively, and Peru, Spain and India came in sixth, seventh and eighth place respectively with an average value of about 945.0, 402.0, 159.0 thousand dollars with a relative importance of about 2.20%, 0.94%, 0.37%, respectively, while the average value of the rest of the countries was 8496.0 thousand dollars with a relative importance of about 19.76%

Table (9) The relative importance of the value of US imports of basil seeds to countries of the world in thousands of dollars during the period (2016-2020)

the years	2016	2017	2018	2019	2020	%	average
Mexico	13877	13877	14335	16257	14336	33.81	14536
Colombia	9572	9884	11213	10288	11837	24.56	10559
Egypt	5966	7349	3689	4678	4311	12.09	5199
Germany	1433	1959	1087	1140	2139	3.61	1552
Israel	1700	1433	1227	706	694	2.68	1152
Peru	1530	930	1352	760	153	2.2	945
Spain	551	491	405	279	286	0.94	402
India	113	204	87	120	269	0.37	159
Rest of the world	3666	3201	12127	10145	13342	19.76	8496
the scientist	38406	39328	45522	44,373	47367	100	42999

source: collected and estimated from: www.treadmap.org

Geographical distribution of the average price of US imports of basil seed crop: By reviewing the data of Table (10), Germany comes in first place in terms of the average export price per ton of basil seeds to America, which was estimated at about 11.90 thousand dollars per ton during the period (2016-2020), while Israel and Peru came in second and third place with an average of about 10.69, 9.40 thousand dollars per ton during the same period, and India and Mexico came in fourth and fifth place with an average price of about 5.46, 4.96 Spain, Colombia and Egypt came in sixth, seventh and eighth place respectively with an average price of about 4.63, 4.58, 1.54 thousand dollars per ton, respectively, while the average price for the rest of the countries was 55.29 thousand dollars.

Table (10) the relative importance of the price of US imports of basil seeds to countries of the world in thousand dollars per ton during the period (2016-2020)

the years	2016	2017	2018	2019	2020	Average
Germany	10,615	11,661	8,983	11,400	16.86	90 . 11
Israel	10.71	10.36	9.8	9.97	12.6	10.69
Peru	4.63	3.86	5.83	6.75	25.93	9.4
India	7.64	4.85	4.08	5.77	4.96	5.46
Mexico	4.76	4.75	4.91	5.04	5.34	4.96
Spain	5.19	3.94	5.34	4.45	4.23	4.63
Colombia	4.76	4.29	4.74	4.53	4.6	4.58
Egypt	1.82	2.21	1.09	1.35	1.22	1.54
Rest of the world	57.37	34.38	35.47	59.15	90.09	55.29
the scientist	4.24	4.03	4.59	4.51	4.74	4.42

www.treadmap.org source:

It is clear from the above that although Egypt's share of the amount of imports of basil seeds represents about 35%, but its share in terms of value is estimated at about 12%, which reflects the low price of the Egyptian export of basil seeds compared to other countries exporting basil seeds to America, which confirms the importance of identifying the reasons for the decline in this price and working to maintain the Egyptian market share of basil seeds in America, and in a way that helps to increase the exported value.

Indicators of the competitiveness of the basil seed crop

Fifth: Indicators Competitiveness of Basil Seed Crop

Egyptian agricultural exports, especially medicinal and aromatic plants, face intense competition from foreign markets in light of the current global and regional economic changes, which requires identifying some indicators of the competitiveness of the basil seed crop.

Shown Relative Advantage Index ¹

The apparent comparative advantage means the extent to which there are advantages in the country that help produce certain goods such as natural and climatic conditions, primary resources or cheap labor force, thus indicates potential opportunities for expanding trade in this commodity. However, these advantages may not help it compete in foreign markets. This may be due to low quality, high cost, or non-conformity with the standard specifications required by foreign markets,

The Revealed Comparative Advantage index is calculated the following formula:

$$RCAJ = (X_{ji}/X_{ja}) / (X_{wi}/X_{wa})$$

whereas:

RCAJ: Apparent Relative Advantage Index

X_{ji} : the value of country j's exports of commodity I.

X_{ja} : the total value of agricultural exports for country j .

X_{wi} : the value of world exports of commodity I.

X_{wa} : the total value of agricultural exports to the world.

¹) Debes, Mohamed Abdel-Khalek Abdel-Moamen Debes, and others, (2004) An economic study of some determinants of Egyptian exports of the most important medicinal and aromatic plants in the most important foreign markets, The Egyptian Journal of Agricultural Economics - Volume Fourteen - Number Three . September

The apparent comparative advantage of Egyptian basil:

The data of Table (11) indicates the value of both Egyptian exports of basil and the value of total Egyptian agricultural agricultural exports, where the average of each of them reached 23.6, 4865.1 million dollars, respectively, during the period (2010-2020), and the data of the same table indicates the evolution of the value of global basil exports and the value of global agricultural exports, as each of them averaged about 92.9, 1536118.5 million dollars, respectively, during the same period, and through those data, it was estimated The indicator of the apparent comparative advantage of Egyptian basil during the period.

The results of estimating the apparent comparative advantage of Egyptian basil in Table (11) show the high value of the apparent comparative advantage of Egyptian basil from the correct one in all years, which confirms the availability of the apparent comparative advantage of Egyptian basil during the period (2010-2020), and it ranged between a minimum of 23.4 in 2010, and a maximum of 87.4 in 2016, and the average period of the apparent comparative advantage of Egyptian basil during the period (2010-2020) was about 56.73.

Table (11) Indicators of the apparent comparative advantage of Egyptian basil during the period (2010-2020)

(Value: Millions of Dollars)

Years	egypt	Egypt	world	World	RCAJ The Revealed
	Value of Basil	Value of Agricultural	Value of Basil	Value of Agricultural	
2010	10.47	3765	90.45	1216210.8	33.45
2011	14.71	3821	82.78	1483362.1	45.76
2012	13.17	4481	83	1506683.6	23.4
2013	21.98	5078	87.25	1583951.1	63.12
2014	31.43	5187	97.6	1614855.3	36.67
2015	31.67	4839	95.55	1450868.7	72.45
2016	37.51	4929	95.63	1467913.1	34.7
2017	30.81	4856	96.22	1588561.6	87.4
2018	23.88	4946	97.04	1657980.3	45.48
2019	23.45	5496	97.71	1647487	71.94
2020	20.44	6120	98.41	1679429.7	55.77
average	23.6	4865	92.9	1536118.5	56.73
minimum	10.5	3765	82.8	1216210.8	23.4
the highest	37.5	6120	98.4	1679429.7	87.4

Source: Information Network, www.faostst database- www.treadmap

Price Competitive Position Index¹:

The ratio between the Egyptian export price of a commodity and the export prices of the most important competing countries of Egypt in the export of that commodity is one of the most important factors affecting the competitive position of Egyptian exports of that commodity in foreign markets, and the price competitive position index is estimated by finding the price ratio of the price of the country's competing exports of the commodity and the prices of Egyptian exports of the same commodity, if the value of this indicator exceeds the one, this indicates that the price of Egypt has no competitive advantage in exporting this commodity, and if Less than the correct one indicates a high price competitive advantage for this crop in foreign markets.

This indicator is calculated by: Estimation

$$PA_j = P_c / P_e$$

PA_j: The ratio between the weighted average prices of the most important competing countries in the global market or (a market) for the crop under study as a whole to the export price of the crop in Egypt.

P_c: the average of the export prices of the crop in the most important competing countries.

P_e: the export price of the crop in Egypt.

Egyptian Basil Competitive Position Index in the US Market

Table (12) shows that the average price of German basil for Egypt is about 0.64, while the average price of Israeli basil for Egypt is about 0.95, and the average price of Peruvian basil for Egypt is about 1.02, while the average price of Indian basil for Egypt is about 1.47, and the average price of Mexican basil for Egypt is about 0.47.

¹) Abdel Aziz, Shawky Amin Abdel Aziz, and others, edicinal and aromatic plants. The Egyptian Journal .of Agricultural Economics - Volume Eighteen - Issue Three - September

Table (12) Index of the price competitive position of Egyptian basil in the US market with the price of basil for some competing countries during the period (2010-2020)

the years	basil price mexico For Egypt	Basil price india For Egypt	Basil price peruvian For Egypt	Basil price Israel for Egypt	Basil price Germany for Egypt
2010	0.62	1.35	0.72	1.17	0.80
2011	0.48	0.93	0.52	0.65	0.46
2012	0.38	0.91	0.60	0.55	0.45
2013	0.26	1.00	0.62	0.61	0.67
2014	0.40	1.09	0.82	0.75	0.60
2015	0.69	1.37	0.91	0.81	0.88
2016	0.33	1.31	0.97	0.79	0.42
2017	0.42	1.56	1.25	1.07	0.41
2018	0.48	1.90	1.44	1.19	0.34
2019	0.53	2.01	1.52	1.26	0.28
2020	0.64	2.80	1.88	1.55	1.69
average	0.47	1.47	1.02	0.95	0.64
minimum	0.26	0.91	0.52	0.55	0.28
maximum	0.69	2.80	1.88	1.55	1.69

Source: Information Network, www.faostst database- www.treadmap

Instability coefficient index:

Agricultural exports are exposed to price, quantitative and value fluctuations from year to year, as well as high elasticity of demand in foreign markets, so the objectives of export policy are not only aimed at achieving an appropriate return from their exports in a certain period of time, but also aim at stabilizing this return over a long period of time. The value of the instability coefficient is calculated through the following equation:

$$\text{Instability coefficient} = \frac{|Y - \hat{Y}|}{\hat{Y}} \times 100$$

Where: \hat{Y} = the estimated value of the variable under study.

Y = the current value of the variable under study.

According to this coefficient, the optimum case for stable exports of the crop is achieved when the coefficient of instability is equal to zero.

Coefficient of instability of Egyptian basil:

The data of Table (13) shows both the actual values and the estimated values from the general trend equation for the quantity, value and price of Egyptian exports of basil, which were used to estimate the instability coefficient for the quantity, value and price of Egyptian basil exported during the period (2010-2020).

The results of estimating the instability coefficient for the quantity of Egyptian basil exported during the period (2010-2020) show that this quantity is characterized by instability in all years, and the minimum amount of stability coefficient reached about 3.18 in 2010, the maximum was about 44.15 in 2012 and an average of about 18.16.

The results of Table (13) showed the estimation of the instability coefficient for the value of Egyptian basil exported during the period (2010-2020), showing that this value is characterized by instability in all years, and the minimum value of the stability coefficient was about 4.51 in 2013, the maximum was about 50.80 in 2016 with an average of about 27.65.

The results of Table (13) showed the estimation of the instability coefficient during the period (2010-2020) for each of the quantity, value and export price of Egyptian basil in the American market, where it is generally clear that

Table (13) Coefficient of instability for basil during the period (2010-2020)
(Quantity of a thousand tons, value in thousand dollars, dollar price per ton)

the ye ars	instability coefficient			estimated value			The real value		
	export price	Values	Quantity	export price	Values	Quantity	export price	Values	Quantity
2010	32.72	39.15	3.18	1845.3	17198.5	8.17	1241.51	10465.9	8.43
2011	4.64	20.39	20.02	1768.4	18477.4	9.94	1850.39	14,710.62	7.95
2012	19.08	33.32	44.15	1691.5	19756.3	11.71	2014.22	13173.03	6.54
2013	10.88	4.51	8.90	1614.6	21035.2	13.48	1790.27	21,984.47	12.28
2014	13.43	40.86	18.16	1537.7	22314.1	15.25	1744.21	31430.61	18.02
2015	1.45	34.23	25.56	1460.8	23593.0	17.02	1481.98	31,669.93	21.37
2016	6.92	50.80	34.91	1383.9	24871.9	18.79	1479.6	37507.77	25.35
2017	0.83	17.83	13.72	1307.0	26150.8	20.56	1317.9	30812.5	23.38
2018	7.43	12.95	6.09	1230.1	27429.7	22.33	1138.65	23877.58	20.97
2019	7.47	18.32	8.80	1153.2	28708.6	24.1	1067.07	23448.87	21.98
2020	12.31	31.83	16.27	1076.3	29987.5	25.87	943.84	20441.63	21.66
average	10.65	27.65	18.16	1845.3	23,593.00	17.02	1460.88	23,592.99	17.08
minimum	0.83	4.51	3.18	1076.3	17198.5	8.17	943.84	10465.9	6.54
maximum	32.72	50.80	44.15	1845.3	29987.5	25.87	2014.22	37507.77	25.35

Source: Information Network, www.faostst database- www.treadmap

Market share index⁽¹⁾ :

The market share index is one of the most important competitiveness indicators for the geographical distribution of exports, by dividing the amount of exports of a country from a particular crop of an importing country by the total amount of imports of the importing country of that crop. The market share index is used to measure competitiveness at the commodity

Amira Ahmed El-Shater, (Doctor), Amal Kamel Eid (Doctor), **An Economic Study of Egyptian⁽¹⁾ Exports of Flax** , The Egyptian Journal of Agricultural Economics, Volume Twenty-Three, Issue .Four, December 2013

level in relation to the total competing countries, and thus shows the efficiency of marketing operations, and its rise is one of the main objectives of the process of expanding the volume of foreign sales to any country, and it is measured according to the following equation:

Market share=	The amount of a commodity that Egypt exports to a country	x 100
	The total amount of a country's imports of the same commodity	

The market share of Egyptian exports of the crops under study shows the extent to which they can be developed in those markets and the extent of the ability of those exports to cover the requirements of those markets and increase their export potential, and this is one of the important mechanisms in the formulation of production and export policies, which is reflected in a cycle on achieving agricultural strategic objectives. In the event of a decrease in the market share of Egyptian exports of the crops under study within the markets with a large absorptive capacity, this requires working to increase the exported quantities of these crops by increasing the competitiveness and price advantages of these crops against their counterparts in Egypt's competing countries.

Market share of Egyptian basil:

The data of Table (16) indicates that the average amount of Egypt's exports of basil to America, Germany and Poland amounted to about 3.21, 0.45, 0.17 thousand tons each, respectively, while the average amount of imports for America, Germany and Poland amounted to about 9.14, 8.48, 0.70 thousand tons each, respectively, during the period (2010-2020).

By studying the market share of Egyptian basil in the markets of those countries, shown in the table, it was found that its highest level in the American market, where it was estimated at 35.11%, as an average for the period (2010-2020), which means that 35.11% of America's imports of basil are obtained from Egypt, and the minimum reached about 34.11% in 2017 and the maximum reached about 36.07% in 2016.

The Poland market comes in second place in terms of the market monument of basil, where it was estimated at 24.77% on average for the period (2010-2020), which means that 24.77% of Poland's imports of basil are obtained from Egypt, and the minimum reached about 23.46% in 2019 and the maximum reached about 26.28% in 2010.

As for the German market, it comes in third place where the market monument of basil, where it was estimated at 24.04%, as an average for the period (2010-2020), which means that 24.40% of Germany's imports of basil are obtained from Egypt, and the minimum reached about 0.56% in 2020 and the maximum reached about 31.91% in 2010.

In light of these results, it should be noted the need for the foreign trade sector of basil to pay attention to the development of Egyptian basil exports in both the German market, where the market share decreases to a clear degree, by following the most important methods and tools that improve competitiveness and thus lead to an increase in that market share, which is naturally possible at the expense of basil imports to the market from other countries to Egypt in exporting basil.

Table (16) Market share of Egyptian basil in thousands of tons in the most important markets during the period (2010-2020)

the years	market share			The amount of imports of the most important countries of the world			The amount of Egypt's exports to the most important countries		
	Poland	Germany	America	Poland	Germany	America	Poland	Germany	America
	26.3	31.9	35.4	0.35	1.50	8.16	0.09	0.48	2.89
2010	25.7	30.6	35.3	0.42	1.55	8.36	0.11	0.47	2.95
2011	25.3	29.4	35.3	0.49	1.59	8.55	0.12	0.47	3.02
2012	25.0	28.2	35.2	0.56	1.64	8.75	0.14	0.46	3.08
2013	24.8	27.1	35.1	0.63	1.69	8.94	0.16	0.46	3.14
2014	24.6	26.0	35.1	0.70	1.73	9.14	0.17	0.45	3.21
2015	24.4	25.0	36.1	0.77	1.78	9.06	0.19	0.45	3.27
2016	24.3	24.2	34.1	0.83	1.83	9.77	0.20	0.44	3.33
2017	24.4	23.1	34.2	0.89	1.88	9.92	0.22	0.43	3.40
2018	23.5	22.4	35.2	1.00	1.92	9.84	0.23	0.43	3.46
2019	24.3	0.6	35.2	1.03	2.16_	10.00	0.25	0.42	3.52
2020	24.8	24.4	35.1	0.70	8.48	9.14	0.17	0.45	3.21
average	23.46	0.56	34.11	0.35	1.50	8.16	0.09	0.42	2.89
minimum	26.28	31.91	36.07	1.03	2.16_	10.00	0.25	0.48	3.52

Source: Information Network, www.faostst database- www.treadmap

Recommendations

- 1- . The need to pay attention to the specifications required for foreign markets
- 2- . Studying different market capacities and specifications for import markets
- 3- Providing marketing information, especially price information, to exporters of . medicinal and aromatic plants plants.
- 4- Paying attention to export control of these crops and amending the technical specifications in line with the standard specifications for the expansion of foreign .exports
- 5- Raising the export efficiency of basil by improving the quality and quantity of crop . production

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Table (1) Evolution of the total area, productivity and production of the green basil crop during the period (2005-2020)

the years	production	Productivity	space
	(ton)	feddan) (ton/	(feddan)
2005	119,689	25.33	4725
2006	134050	25.27	5304
2007	152589	25.36	6016
2008	118,942	24.89	4778
2009	190,992	23.92	7983
2010	150929	23.76	6353
2011	146,625	21.78	6731
2012	158481	24.25	6536
2013	145995	25.61	5700
2014	166,658	20.87	7986
2015	123058	18.71	6576
2016	137,990	20.08	6871
2017	166885	19.53	8544
2018	175,889	18.02	9762
2019	214431	16.53	12975
2020	245,547	17.65	13910
average	159296.9	21.97	7546.9
minimum	118,942	16.53	4725
maximum	245,547	25.61	13910

Source :Estimated from: The Ministry ,of Agriculture and Land Reclamation
Central Administration for Agricultural Economy- bulletin
Agricultural Economics- many issues

**Table (3): Quantity, value and average price of Egyptian exports
From Al-Rayhan during the period (2005-2020)**

the years	export price thousand) (dollars/ton	exports value thousand dollars	export amount (ton)
2005	1140.62	11965.13	10.49
2006	1473.98	12764.63	8.66
2007	1165.03	21494.80	18.45
2008	1331.04	18035.60	13.55
2009	1367.73	11064.93	8.09
2010	1241.51	10465.90	8.43
2011	1850.39	14,710.62	7.95
2012	2014.22	13173.03	6.54
2013	1790.27	21,984.47	12.28
2014	1744.21	31430.61	18.02
2015	1481.98	31,669.93	21.37
2016	1479.60	37507.77	25.35
2017	1317.90	30,812.50	23.38
2018	1138.65	23877.58	20.97
2019	1067.07	23448.87	21.98
2020	943.84	20441.63	21.66
average	1409.25	20928.00	15.45
minimum	943.84	10465.90	6.54
the highest	2014.22	37507.77	25.35

Source: Information Network, - www.treadmap