

	Kilograms.	Value.
Brought forward.....	876,260	\$ 36,970
Hidalgo.....	42,205	5,670
México.....	8,284	432
Michoacán.....	863,052	37,032
Morelos.....	62,134	5,400
Puebla.....	113,911	10,025
San Luis Potosí.....	19,212	1,063
Tamaulipas.....	17,259	1,440
Veracruz.....	6,918	529
	<hr/> 1,959,235	<hr/> \$ 98,561

Chia [*Salvia chian*]. This seed is extensively cultivated in different parts of the great Central Tableland. It is a very small seed, and contains fecula, a drying oil and a mucilage like gum tragacanth, and when mixed with water swells considerably. In this condition, it is sweetened, and with the addition of a little lemon juice, makes an agreeable and refreshing drink. The only data that we have been able to procure as to its production, is from the State of Guanajuato, and shows a crop a 138,074 kilograms with a value of \$ 12,000

Peanut [*Arachis hypogea*], This nut is indigenous to Mexico, and is generally found cultivated in the sections where sweet potatoes are grown, that is to say in the States of Guanajuato, Querétaro and Michoacan. The small roots which grow underground have from two to six oleagenous nuts, which when toasted in the oven have a most delicious flavor. The same nuts produce a special class of oil and the roots are commonly employed as a substitute for horehound. The annual production is as follows:

	Hectolitres.	Value.
Aguascalientes.....	2,724	\$ 6,000
Chihuahua.....	727	3,200
Durango.....	1,090	3,300
Guanajuato.....	1,071	4,732
Carried forward.....	<hr/> 5,612	<hr/> \$ 17,232

	Hectolitres.	Value.
Brought forward.....	5,612	\$ 17,232
Hidalgo.....	454	1,250
Jalisco.....	45	104
Oaxaca.....	1,725	4,750
Veracruz.....	36	156
	<hr/> 7,872	<hr/> \$ 23,492

Potatoes [*Solanum tuberosum*]. The cultivation of this important tuber is extended over the greater part of the country at the higher elevations, such as are proper for resinous plants, because although it will grow in the hot country it does not throw out enough roots and therefore, gives a very small crop. The Mexican potatoe is very similar to the European, and like that is very abundant in flour, and of good flavor. The annual crop is as follows:

	Kilograms.	Value.
Aguascalientes.....	32,682	\$ 1,780
Lower California.....	23,012	1,500
Chiapas.....	294,599	7,680
Chihuahua.....	242,899	10,292
Coahuila.....	483,260	42,000
Durango.....	278,174	16,592
Guanajuato.....	71,569	4,665
Guerrero.....	30,100	5,004
Hidalgo.....	210,918	26,720
Jalisco.....	226,626	10,952
México.....	559,772	35,810
Michoacan.....	354,712	15,115
Morelos.....	11,046	960
Nuevo Leon.....	73,179	4,580
Oaxaca.....	196,801	7,769
Puebla.....	1,420,740	55,684
Querétaro.....	78,732	2,830
San Luis Potosí.....	157,821	5,370
Carried forward.....	<hr/> 4,746,642	<hr/> \$ 275,303



	Kilograms.	Value.
Brought forward.....	4,746,642	\$ 272,303
Sinaloa.....	157,819	11,316
Sonora.....	103,956	7,240
Tabasco.....	13,807	125
Tamaulipas.....	16,569	840
Tepic.....	90,024	4,524
Tlaxcala.....	425,269	16,480
Veracruz.....	509,909	21,700
Zacatecas.....	559,742	33,902
	<hr/> 6,623,737	<hr/> \$ 351,430

Chili pepper. This is produced throughout the entire country and in great abundance throughout the temperate and damp districts. There are many species and varieties of this valuable plant which are used either green or dry in pickles, and in prepared sauces, constituting the flavouring material which is mostly employed by the Indians and poor people. It is largely used as a condiment for dishes prepared with either corn or beans. Some of them are used dry and others in their green condition, and are known by their size, their flavour and their taste which is more or less fiery.

The principal classes are: *Capsicum longum*, amongst whose varieties we have the *Chile pasilla* very largely consumed and extensively cultivated, particularly on the estate of "Queréndaro" of the State of Michoacan. Its fruit is long, measuring as much as 19 centimetres and when ripe it has a dark color, which turns to black on drying, that being the form in which it is marketed.

The *Capsicum cordiforme*, one variety of which is called *Chile ancho*, is also extensively consumed and is cultivated on a very large scale on the estate of "El Jaral" in the State of Guanajuato. The *Chile mulato* is another variety which is very similar in its taste to the *Capsicum dulce*, or *valenciano*, and which in its green state is commonly called *poblano*; it is specially cultivated in the States of Puebla and Oaxaca.

The annual crops of dry chile alone reach the following amounts:

	Kilograms.	Value.
Aguascalientes.....	233,219	\$ 48,450
Lower California.....	1,266	550
Campeche.....	2,301	750
Chiapas.....	57,709	12,527
Chihuahua.....	535,037	144,687
Coahuila.....	368,198	18,000
Durango.....	292,602	51,563
Guanajuato.....	826,778	267,615
Guerrero.....	117,611	23,551
Hidalgo.....	154,425	34,537
Jalisco.....	570,697	102,282
México.....	41,192	13,075
Michoacan.....	799,773	269,693
Morelos.....	41,422	18,000
Nuevo Leon.....	8,020	849
Oaxaca.....	158,994	55,385
Puebla.....	475,970	132,958
Querétaro.....	327,351	84,950
San Luis Potosí.....	883,210	160,320
Sinaloa.....	805	210
Sonora.....	261,641	42,015
Tamaulipas.....	13,290	3,465
Tepic.....	6,559	2,200
Tlaxcala.....	36,129	12,825
Veracruz.....	183,028	37,157
Yucatan.....	64,361	14,925
Zacatecas.....	465,552	110,024
	<hr/> 6,906,140	<hr/> \$ 1,648,368

The vine [*Vitis vinifera*]. The introduction of the grape vine into Mexican territory was due to the Father of our Independence, the celebrated curate of the town of Dolores, Don Miguel Hidalgo y Costilla. Not content with introducing many public improvements in his parish, he undertook the cultiva-



tion of this plant on a large scale. From Dolores this valuable vine was propagated throughout the Northern regions of the country, as far as the town of Parras, and to-day its cultivation is extended to many States of the Republic.

The annual products derived from this plant are as follows:

GRAPES.		
	Kilograms.	Value.
Aguascalientes.....	162,468	\$ 26,120
Lower California.....	78,241	15,600
Chiapas.....	1,151	160
Chihuahua.....	1,391,836	191,170
Coahuila.....	1,560,241	64,600
Durango.....	200,898	12,210
Guanajuato.....	304,625	14,900
Hidalgo.....	18,272	1,602
Jalisco.....	193,318	16,583
Michoacan.....	690	40
Nuevo Leon.....	2,899	204
Puebla.....	11,506	500
Querétaro.....	16,281	1,515
San Luis Potosí.....	12,392	987
Sonora.....	82,937	7,626
Zacatecas.....	183,907	19,661
	4,221,662	\$ 373,478

WINE.		
	Hectolitres.	Value.
Aguascalientes.....	137	5,000
Lower California.....	91	2,500
Chihuahua.....	4,836	71,300
Coahuila.....	3,897	68,600
Durango.....	366	13,175
Guanajuato.....	367	16,859
Jalisco.....	48	1,380
Puebla.....	136	1,600
Carried forward.....	9,878	\$ 180,414

	Hectolitres.	Value.
Brought forward.....	9,878	\$ 180,414
Querétaro.....	14	280
San Luis Potosí.....	140	6,150
Sonora.....	14	720
Zacatecas.....	433	9,465
	10,479	\$ 197,029

SPIRITS.		
Lower California.....	227	\$ 6,637
Chihuahua.....	705	20,965
Coahuila.....	2,941	80,400
Guanajuato.....	68	1,500
San Luis Potosí.....	32	6,290
Sonora.....	9	450
Zacatecas.....	29	1,095
	4,011	\$ 112,337
Total value of products of vines.....		\$ 682,844

Maguey is the general name by which is designated the different species of the genus agave, of the family of the *Amari-ideas*. This species is found disseminated throughout the Republic, having the most varied uses and products.

The cultivated maguey or metl [*Agave potatorum*] produces the drink known under the name of pulque, the finest and best quality being produced of the plains of Apam and the adjacent lands of the States of Mexico and Hidalgo. The limits of this zone may be considered to be Pachuca on the North, Huamantla on the East, Texcoco on the South, and Zumpango on the West. All the other districts of these States, of Puebla, and the Federal District, produce the same liquor but of inferior class, commonly called *pulque tlachique*, although the plants from which the liquor is extracted are of the same class as those on the plains of Apam, thus proving that in the latter district the plant is specially favored by the quality of the land and the climate. This class of maguey also produces a sugar



whose saccharine qualities are superior to that of beet root sugar, and very little inferior to that of the white cane sugar.

When properly distilled, fresh pulque yields different quantities of alcohol according to its degree of acidity, and the larger or smaller amount of water that has been added. Strong cordage and a fair class of paper are manufactured from its fibres.

The maguey is one of the most useful plants to man, for besides producing great benefits in the forms above referred to, it also provides the poor people of the country leaves for thatching their humble cottages; from some classes a valuable spirit is extracted called mezcal; the leaves yield fibre which are made into twine, ropes, and cloth; the points furnish pins and nails for the country people and when the trunk has been killed in the extraction of pulque, it makes fuel for the poor, whilst even the ashes which are the last vestige of this useful plant, furnish a remedy for the curing of certain diseases in animals. The species of maguey known as *lechuguilla* yields a fibre with an average length of 60 to 80 centimetres, and is found growing in all parts of the Republic.

The leaves of other species of this valuable plant produce beautifully soft fibres which reach a length of 3 yards, and are manufactured into cordage, bagging, and cloths of different qualities, but of great utility. Some varieties of the maguey which are found in the interior of the country, produce a spirit called mezcal, which is very similar to gin, whilst in the 12th Canton of the State of Jalisco the famous Tequila is made, which is believed to be very similar to Jamaica rum.

And lastly, the special variety of maguey which is indigenous to the Peninsular of Yucatan, produces a particularly valuable fibre, which is so highly esteemed that it forms the principal trade of that section.

The great consumption of pulque in all the towns of those districts which produce the *maguey manso*, and in all the vicinity of that region, particularly the city of Mexico; the very

general use of mezcal and tequila; the production of ixtle fibre, which is so largely exported, reaching the amount of 8,000,000 kilograms, and henequen the amount of 54,000,000 kilograms; all go to prove the enormous importance of the cultivation of the numerous varieties of the Mexican maguey.

The following table shows the principal productions of the maguey in one year:

## MEZCAL SPIRIT.

	Hectolitres.	Value.
Lower California.....	310	\$ 6,800
Chiapas.....	7,446	100,720
Chihuahua.....	10,043	187,500
Coahuila.....	52,818	894,600
Durango.....	15,391	271,880
Guanajuato.....	5,612	186,312
Guerrero.....	6,919	69,071
Hidalgo.....	582	5,680
Jalisco.....	111,561	1,166,240
México.....	59	1,120
Michoacan.....	1,051	17,920
Morelos.....	909	14,272
Nuevo Leon.....	1,581	21,550
Oaxaca.....	11,704	189,028
Puebla.....	3,310	50,922
Querétaro.....	133	2,160
San Luis Potosí.....	33,063	331,548
Sinaloa.....	8,314	146,814
Sonora.....	6,774	186,425
Tamaulipas.....	822	13,445
Tepic.....	369	4,500
Tlaxcala.....	414	7,848
Zacatecas.....	13,417	165,600
	292,602	\$ 4,041,955



PULQUE.	Hectolitres.	Value.
Aguascalientes.....	164	1,000
Chiapas.....	7,000	15,000
Coahuila.....	24,624	50,000
Federal District.....	84,843	139,607
Durango.....	3,313	6,800
Guanajuato.....	40,407	57,140
Guerrero.....	74	135
Hidalgo.....	1,586,310	2,471,564
Jalisco.....	9,571	26,754
México.....	662,908	1,072,395
Michoacan.....	83,210	153,221
Morelos.....	270	648
Oaxaca.....	81,309	149,780
Puebla.....	118,790	155,393
Querétaro.....	26,746	46,282
San Luis Potosí.....	27,168	37,512
Tamaulipas.....	74	400
Tlaxcala.....	338,436	512,837
Veracruz.....	8,954	10,490
Zacatecas.....	9,819	24,617
	3,113,990	\$ 4,931,575

## HENEQUEN FIBRE.

	Kilograms.	Value.
Campeche.....	1,067,567	\$ 176,600
Chiapas.....	93,338	14,659
Veracruz.....	10,010	2,674
Yucatan.....	57,218,000	8,195,792
	58,388,915	\$ 8,388,792

## IXTLE FIBRE.

Aguascalientes.....	11,506	\$ 1,000
Chiapas.....	113,278	14,856
Chihuahua.....	34,519	1,500
Carried forward.....	159,303	\$ 17,356

	Kilograms.	Value.
Brought forward.....	159,303	\$ 17,356
Coahuila.....	1,840,992	112,625
Durango.....	56,956	3,675
Guanajuato.....	640,823	24,190
Guerrero.....	17,075	2,273
Hidalgo.....	104,856	12,136
Jalisco.....	79,059	8,957
México.....	39,305	5,670
Michoacán.....	7,824	1,791
Morelos.....	115	20
Nuevo Leon.....	521,231	34,005
Oaxaca.....	395,100	26,696
Puebla.....	10,413	957
Querétaro.....	30,463	2,344
San Luis Potosí.....	1,638,780	143,810
Sinaloa.....	12,082	1,700
Tabasco.....	8,054	2,800
Tamaulipas.....	2,531,364	165,000
Tepic.....	1,151	100
Tlaxcala.....	6,904	150
Veracruz.....	9,205	1,530
Zacatecas.....	51,930	5,657
	8,162,985	\$ 15,170,612

## TEXTILE PLANTS.

From what has already been written, it will be observed, that the vegetation throughout the territory of the Republic is as rich as it is varied in the three regions mentioned, the number of textile plants which are found through the entire country being really wonderful. The greater part of them grow spontaneously with a prodigious development, providing valuable filaments for industrial purposes, and ranging from the finest classes to the coarsest and strongest, which are equally good if not superior to the best hemp.



The principal plants worth mentioning in this class are as follows:

Different kinds of magueys or agaves, such as the *agave iztli*, *agave lechuguilla*, *agave americana*, *agave mexicana*, *agave vivipara*, *agave saponaria*, *agave lutea* and many others, the principal varieties of which we have already spoken of, as well as their more important products.

Several species of plaintains (*Musa*) which as well as the tules (*Cyperus*) contain an abundant supply of fine white fibres.

Amongst the *Malvaceas*, we find growing wild the Huinar or Alacle de Morelos (*Sida romboidea*) with long and light colored filaments. Other species of Huinar, such as the *Malva Scoparia*, found in Michoacan and commonly called Popotalagua or Apilzapatli, and the *Malvabiscus arboreus*, the Mazahual (*Hibiscus tiliaceus*), abound on the gulf coast.

Of the *Urticacea* family we find the *Urtica dioica* with a textile bark very similar to hemp, the chichicaxtle of the State of Morelos which appears to be a species of *Baehmaria*, producing an excellent filament. The ramie, *Urtica Baehmaria*, is cultivated with excellent results in various parts of the Republic, principally in the States of Puebla and San Luis Potosí.

Different *Bromeliaceas*, such as the Bromelia of Tehuantepec the grasses (*Tillandsia*), and the Izotes (*Yucas*) of the lilaceas.

Numerous speices of palms also supply excellent fibres which can be utilized in different industries.

Other plants of different families also produce very good fibres, such as the cotton of the biznagas (*Mamillaria*); the cacti, among which are found the organ (*Cactus cereus*) with a long silky filament; the Pochote (*Eriodendron anfractuossu*), whose seeds are inclosed in filaments as fine as those of cotton, and cuaulahua (*Heliocarpus Americanus*) found in the States of Morelos and Puebla, as well as the flax already spoken of. In the territory of Lower California, between the degrees of 27 and 31 N. L. a species of cactus is produced which

is called Cirio, and whose fibres form excellent material for the manufacture of paper, whilst on the banks of the Colorado river hemp is found in abundance.

Summarizing the preceeding data we find the value of the principal agricultural products of the country, to be as follows:

Vanilla.....	Thousands.	28,000	1,000,000
Jalap root.....	Kilograms.	97,020	100,000

#### SUGAR CANE PRODUCTS.

Sugar.....	"	41,043,469	6,471,232
Panocha.....	"	62,992,438	4,260,632
Spirits.....	Hectolitres.	296,623	4,057,512

Coffee.....	Kilograms.	19,369,000	7,516,090
Tobacco.....	"	5,711,968	1,979,915
Rice.....	"	10,694,170	878,213
Cotton.....	"	27,451,874	5,082,531
Cocoa.....	"	1,099,334	810,428
Indigo.....	"	277,395	332,760
Maize.....	Hectolitres.	27,774,237	47,879,827
Wheat.....	"	3,430,304	12,657,983
Beans.....	"	955,060	4,069,307
Barley.....	"	2,131,714	3,331,822
Chick peas.....	"	238,676	636,292
Peas.....	"	64,276	230,414
Lentils.....	"	9,941	31,183
Lima beans.....	"	184,902	365,161
Sesame seed.....	Kilograms.	1,959,235	98,561
Chia.....	"	138,074	12,000
Peanuts.....	Hectolitres.	7,872	23,492
Potatoes.....	Kilograms.	6,623,737	351,430
Chile peppers.....	"	6,906,140	1,648,368

Carried forward..... 219,485,459 \$ 103,825,153



Brought forward..... 219,485,459 \$ 103,825,153

GRAPE VINE PRODUCTS.

Grapes.....	„	4,221,662	373,478
Wine.....	Hectolitres.	10,479	197,029
Spirits.....	„	4,011	682,844

MAGUEY PRODUCTS.

Spirits.....	„	292,602	4,041,955
Pulque.....	„	3,113,990	4,931,575
Henequen.....	Kilograms.	68,388,915	8,388,792
Ixtle.....	„	8,162,985	15,170,612
Linseed.....	„	726,340	37,610

Value of principal Agricultural Products..... \$ 137,649,858

X

COLONIES.

The colonization laws authorize the Government to colonize the country either by direct action or by means of contracts with private companies, granting to the colonists various privileges and exemptions, such as selling to them the lands they require at a low price and on long time, allowing them also to pay by annual instalments, the first of which would come payable two years after the settlement of the colonies. They also grant an exemption for 10 years, from military service and from all classes of taxes, except municipal taxes; also an exemption from the payment of import and interior duties on all the provisions, agricultural implements, tools, utensils, building materials, second hand furniture, animals for work or for breeding, that may be destined for the colonies. They also enjoy an exemption which is personal and intransferable, from the payment of export duties on the products of their farms, besides premiums and special protection on the introduction of a new cultivation or industry.

This law also authorizes the Government to concede Mexican naturalization and citizenship to the colonists and to advance them the necessary sums for their transport and maintenance as well as for the purchase of the agricultural implements and material with which to build their houses.

The Government being desirous of attracting to Mexican territory, colonists from abroad, it made several attempts to