

COMISIÓN DEL CODEX ALIMENTARIUS



Organización de las Naciones
Unidas para la Agricultura
y la Alimentación



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Agenda Item 7

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON FRESH FRUITS AND VEGETABLES
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PROJECT DOCUMENT FOR A
DRAFT CODEX STANDARD FOR PASSION FRUIT

(Prepared by Colombia)

The National Committee of the Codex Alimentarius Commission of Colombia is grateful for the attention of the Codex Committee on fresh fruit and vegetables and is pleased to present the following document, hoping that the draft Codex Standard for Passion Fruit can be accepted as a work priority, for the benefit of the protection of the consumer's health and fair practices in food trade.

1. Purposes and the scope of the Standard

The scope of the Standard is the passion fruits (*Passiflora adenopoda* Juss) which are supplied fresh to the consumer, after their conditioning and packaging. The objective of the development of the Standard is to have a document of international coverage, which reflects the physical and chemical requirements to characterize the passion fruits, taking into account the particularities of this fruit and the guidelines established by the Codex for products for human consumption

2. Relevance and timeliness

According to the report of 11th meeting of the Committee of fresh fruits and vegetables (2003) in Mexico City, Colombia proposed to include the development of a Standard for Passion Fruit.

Worldwide, according to FAO data, the growth in production and acreage of fresh fruit has been variable. China, for the year 2005, was the country with further increase in production (4.79%) and cultivation area (9.15%) followed by Viet Nam, while Colombia had a 1.58% increase in production and 2.62% in the cultivation (see tables 1 and 3).

TABLE 1. Global Production of fresh fruit (Tm)

Country	Year 2004	Year 2005	Participation (Year 2005)	Growth (1996-2005)
India	6,600,000	6,600,000	25.58%	2.06%
Viet Nam	2,700,000	2,750,000	10.66%	5.81%
China	1,664,292	1,790,000	6.94%	4.79%
México	320,000	320,000	1.24%	-1.57%
Colombia	177,000	178,000	0.69%	1.58%

Source: FAO - calculations Observatory Agrocaldas Colombia - Ministry of agriculture and Rural development.¹

¹ Ministerio de Agricultura y Desarrollo Rural - Observatorio Agrocaldas Colombia – Producción. Cadena: Frutas de Exportación. Información Mundial, Fruta Fresca NEP. www.agrocaldas.gov.co

TABLE 2. Global Fruit Production, Exc melons, per country
Tons (Ton) 2007-2009

Country	2007 TON	2008 TON	2009 TON
China	102,429,798	109,615,629	114,139,129
India	62,356,000	67,209,200	68,358,200
Brazil	39,194,929	38,683,456	37,686,986
USA	25,087,859	27,762,483	27,115,927
Italy	16,805,873	17,646,110	18,123,049
Indonesia	16,649,426	16,028,273	17,057,712
Mexico	15,825,514	16,122,211	16,122,211
Philippines	14,153,088	15,620,664	15,910,684
Spain	15,113,927	16,277,697	14,373,497
Turkey	12,286,895	12,829,520	14,080,693
Iran	12,982,303	13,183,703	13,183,703
Uganda	9,898,600	10,038,600	10,179,600
Egypt	9,355,669	9,601,002	9,803,855
Nigeria	9,799,000	9,502,000	9,502,000
France	9,313,191	8,501,729	8,984,215
Ecuador	7,317,346	7,927,988	8,901,558
Thailand	9,466,183	8,619,595	8,326,923
Argentina	8,106,580	8,106,600	8,106,600
Colombia	8,140,821	8,382,050	7,990,000
Pakistan	6,649,200	7,094,533	7,094,533
Southafrica	5,994,415	6,172,284	5,966,794
Viet Nam	5,721,000	5,721,000	5,721,000
Chile	5,337,200	5,387,200	5,487,200
Costa Rica	5,264,492	4,624,679	4,866,148
Tanzania	4,708,450	4,708,450	4,708,450
Ghana	3,941,050	4,044,990	4,269,800
Peru	4,132,210	4,206,114	4,159,533
Rest of the World	115,038,329	116,308,644	117,450,476
Total	561,069,348	579,926,404	587,670,476

Source: FAO STAT. January 28, 2011

As shown in table 2, the volume of production of passifloras, including the passion fruit, has increased in recent years presenting a total of 587,670,476 tons produced in year 2009. The main producing countries were: China, India, Brazil, United States, Italy, Indonesia and Mexico.

TABLE 3. Cultivated Area for fresh fruit (Has)

Country	Year 2004	Year 2005	Participation (Year 2005)	Growth (1996-2005)
India	700,000	700,000	19.51%	1.78%
Viet Nam	220,000	225,000	6.27%	4.29%
China	656,215	666,300	18.57%	9.15%
Mexico	46,000	46,000	1.28%	-1.26%
Colombia	15,600	15,800	0.44%	2.62%

Source: FAO - calculations Observatory Agrocaldas Colombia - Ministry of agriculture and Rural development. ²

With regards on the exports of fresh fruit at a global level it can be appreciated a participation of Thailand with 20.09%, while Colombia provides the 0.77%. Contrary to what is observed, when the rate of export growth is analyzed, the increase of Thailand was 1.95%, while in Colombia the increase was 14.52% (table 3).

TABLE 4. World Exports of fresh fruit fresh Tm

Country	Year 2003	Year 2004	Participation (Year 2004)	Growth (1995-2004)
Thailand	118,286	165,541	20.09%	1.95%
Hong Kong	57,566	93,924	11.40%	16.03%
México	12,066	13,596	1.65%	25.93%
Colombia	4,066	6,337	0.77%	14.52%
Chile	5,518	4,515	0.55%	17.06%

Source: FAO - calculations Observatory Agrocaldas Colombia - Ministry of agriculture and Rural development. ³

² Ministerio de Agricultura y Desarrollo Rural - Observatorio Agrocaldas Colombia – Superficie Cultivada. Cadena: Frutas de Exportación. Información Mundial, Fruta Fresca NEP. www.agrocaldas.gov.co.

³ Ministerio de Agricultura y Desarrollo Rural - Observatorio Agrocaldas Colombia – Exportaciones. Cadena: Frutas de Exportación. Información Mundial, Fruta Fresca NEP. www.agrocaldas.gov.co.

**TABLE 5. Exporting Countries of edible fruit; Peel of citrus fruit or melons (chapter 08)
(Ton) 2006-2009**

Countries	2006 TON	2007 TON	2008 TON	2009 TON
Spain	5,859,647	5,912,191	5,633,730	5,965,402
Ecuador	5,150,023	5,466,869	5,526,439	5,920,555
USA	4,381,896	4,472,067	4,789,059	5,053,324
China	2,152,978	2,624,321	3,064,883	3,492,403
Netherlands	2,036,621	2,278,913	2,406,850	2,797,115
Italy	2,722,075	2,855,091	2,733,199	2,684,375
Chile	2,457,420	2,557,966	2,638,255	2,637,899
Southafrica	2,268,020	2,523,912	2,495,176	2,607,752
Costa Rica	3,694,662	3,936,581	3,749,957	2,569,639
México	2,125,472	2,291,851	2,416,598	2,556,743
Belgium	2,398,234	2,576,021	2,622,668	2,534,229
Turkey	1,990,250	1,766,469	1,771,541	2,281,893
Colombia	1,714,423	1,775,330	1,834,304	2,130,863
Guatemala	1,246,800	2,035,205	1,911,732	2,122,140
Philippines	2,751,983	2,669,970	2,661,465	2,102,929
France	1,476,619	1,412,810	1,379,039	1,351,296
Argentina	1,434,727	1,601,651	1,569,465	1,337,416
Gambia	766	1,150	30,880	1,295,061
Poland	520,353	920,315	904,599	1,235,731
Thailand	618,696	752,995	765,847	1,036,019
Hong Kong (China)	403,192	498,273	591,224	911,698
Honduras	801,771	865,876	942,941	867,225
Brasil	873,937	1,000,703	949,418	846,867
Germany	929,661	914,836	926,270	841,283
India	645,287	634,147	827,372	813,685
Rest of the World	13,748,494	14,379,803	95,364,408	14,104,804
Total	65,405,456	69,940,453	151,972,999	73,374,787

Source: Trademap. January 28, 2011

Likewise, world imports of fresh fruit have presented variations. In China, imports have grown 15.83%, in the Netherlands, 11.74% and United States of America 9.11%. This reinforces the need to increase the production and trade of fresh fruit for consumption in order to meet its growing demand (table 6).

TABLE 6. Fresh Fruit World imports (Tm)

Country	Year 2003	Year 2004	Share (Year 2004)	Growth (1995-2004)
China	154,971	138,624	13.84%	15.83%
Hong Kong	109,771	133,360	13.31%	6.52%
USA	63,369	78,812	7.87%	9.11%
Germany	36,098	41,682	4.16%	5.97%
Netherlands	26,490	34,438	3.44%	11.74%

Source: FAO - calculations Observatory Agrociencias Colombia - Ministry of agriculture and Rural development. ⁴

After analyzing the information of the world trade of fresh fruits, for Colombia is a priority to establish a Codex Standard for Passion Fruit, this product as well as to be of commercial importance at the global level, for the country has a high social content due to the amount of labour force employed in its cultivation

As in the case of the pitahaya and cape gooseberry, for which there already are Codex standards - also proposed by Colombia, the passion fruit is widely cultivated in the country and currently is part of the Group of fruits of the "*Apuesta Exportadora Agropecuaria de Colombia*".

According to statistics by the Ministry of Agriculture and Rural Development, the harvested area has increased, year after year (table 7). The analysis of the figures since 1992 until 2006 shows a sharp increase from the year 2004 until 2009, and also an annual average growth of 17.1% in relation to the cultivated area with passion fruit.

TABLE 7. Harvested area of Passion Fruit in Colombia (hectares)

YEAR	AREA (Has)
2002	1,788
2003	1,821
2004	1,920
2005	3,073
2006	3,697
2007	4,861
2008	6,386
2009	7,157
Average growth per year: 17.1%	

Source: Agronet - Ministry of agriculture and Rural development. ⁵

⁴ Ministerio de Agricultura y Desarrollo Rural - Observatorio Agrociencias Colombia - Importaciones. Cadena: Frutas de Exportación. Información Mundial, Fruta Fresca NEP. www.agrociencias.gov.co.

⁵ Ministerio de Agricultura y Desarrollo Rural - Agronet. Área Cosechada, Producción y Rendimiento de Granadilla, 1992-2006. www.agronet.gov.co

The increase of the cultivated area has also increased the volume of production, fact that accordingly to the Ministry of Agriculture and Rural Development creates the need to open up new markets and generate increased demand in countries where this fruit is marketed.

TABLE 8. Export of passion fruit and other passifloras, by country of destination (kg)

DESTINY	2003	2004	2005	2006	2007
Germany	106,458	178,455	687,949	444,014	328,773
Netherlands	98,714	194,360	349,560	366,603	231,618
Canada	47,630	51,453	59,525	76,073	264,502
France	65,394	97,634	218,920	196,741	149,561
UK	55,367	123,348	230,617	186,473	82,641
Spain	67,222	61,497	105,194	98,179	84,368
Venezuela	60,827	161,322	165,450	193,969	87,271
Switzerland	16,157	46,805	54,138	70,695	46,156
Costa Rica	41,958	81,851	58,010	94,103	61,731
Sweden	7,257	28,308	37,513	55,730	45,038
Italy	19,993	38,460	34,027	39,275	26,254
Portugal	6,941	58,812	13,477	12,825	19,391
Belgium	3,130	3,887	75,937	39,651	10,473
Panamá	21,213	13,404	23,172	22,320	15,067
Guatemala	-	-	-	2,368	17,199
United Arab Emirates	-	2,465	5,740	6,420	5,288
Denmark	186	41	-	-	1,812
West Indies	2,985	3,485	3,221	5,714	4,039
USA	-	12,527	6,301	11,724	2,895
Finland	-	-	-	-	2,570
Aruba	3,120	-	557	2,773	2,318
Brazil	6,404	4,550	8,224	6,396	1,209
Russia	-	-	281	-	18
México	-	-	2,427	-	2
Hong Kong	-	25	-	-	-
Swaziland	-	2,436	7,805	548	-
Indonesia	-	407	-	-	-
Armenia	-	-	100	-	-
Peru	-	44	-	-	-
Norway	614	934	-	-	-
Ecuador	174,691	305,894	24,210	-	-
New Zealand	133	-	-	-	-
Ireland (Eire)	-	438	201	-	-
Argentina	-	56	-	-	-
Lithuania	34	-	-	-	-
Austria	-	2,821	4,641	-	-
Afghanistan	-	681	-	-	-
Gibraltar	-	8,250	-	-	-
TOTAL	806,428	1,484,649	2,177,198	1,932,592	1,490,196

Source: Proexport Colombia - March 2008. ⁶

⁶ Proexport Colombia. Macrosector Agroindustria – Sector Agrícola.

As shown in table 8, the volume of exports of passion fruit has had large fluctuations, presenting a total of 2,177,198 kilograms exported in 2005. The main destinations of Colombia's exports during 2007 were: Germany, Netherlands, Canada, France and United Kingdom.

According to reports from the Colombian Agricultural Institute - ICA, for the year 2007 the total volume of passion fruit that left Colombia by the airport El Dorado (Bogota, D.C.) and different border crossings during the year 2007 was 808,700 kilograms.⁷

The main producers of passion fruit include Brazil, Colombia, Kenya, Ivory Coast, South Africa and Australia

Passion fruit's major importing markets are the European Union, Canada and United States of America.⁸

On the other hand, the volume of exports of passion fruit (table 9), has had large fluctuations, presenting a total of 879,358 kilograms exported in the year 2010, The main destinations for export of passion fruit during the year 2010 were: Ecuador, Netherlands, Canada, Costa Rica, France, Germany, Spain, Portugal and Italy.

⁷ Instituto Colombiano Agropecuario – ICA. Subgerencia de Protección y Regulación Agrícola. Febrero de 2008.

⁸ Convenio MAG – IICA Subprograma Cooperación Técnica. Identificación de Mercados y tecnología para productos agrícolas de exportación. Ecuador, Mayo de 2001.

TABLE 9. Colombia exports of Passion Fruit (*Passiflora Adenopoda*), fresh (P.A. 0810,90,10,10), by country destination
value (Us\$) - kilograms (Kg), 2007 - November 2010

Country of destination	2007		2008		2009		JAN - NOV 2009		JAN - NOV 2010	
	US\$	KG	US\$	KG	US\$	KG	US\$	KG	US\$	KG
ECUADOR	95,760	438,400	967,806	1,876,468	1,244,974	445,526	1,077,960	381,586	677,453	261,054
NETHERLANDS	116,903	35,230	601,205	182,046	553,464	168,055	472,022	143,959	454,124	126,868
CANADA	44,733	10,081	163,032	33,590	223,079	52,101	220,875	51,686	211,990	60,010
COSTA RICA	39,956	14,563	213,415	76,944	218,396	75,257	200,070	69,986	209,034	102,519
FRANCE	42,350	11,168	346,503	86,468	191,253	67,907	180,348	64,403	206,167	70,741
GERMANY	65,437	24,937	354,673	116,326	311,654	99,398	278,629	88,959	184,249	53,417
SPAIN	28,253	12,454	181,345	56,425	98,057	39,587	93,131	37,873	93,562	32,022
PORTUGAL	5,555	2,816	37,602	17,598	40,942	15,336	29,934	11,464	89,042	31,100
ITALY	13,521	4,065	100,870	32,298	109,405	37,331	81,305	27,084	69,425	24,319
BRAZIL	8,387	3,111	35,765	12,586	35,903	11,390	31,020	9,984	57,899	17,306
UNITED ARAB EMIRATES	5,644	3,055	34,521	17,286	42,180	17,672	33,776	13,948	57,179	18,121
UNITED KINGDOM	25,752	8,778	130,021	46,703	83,948	26,017	72,681	21,919	48,491	17,407
BELGIUM	1,291	309	18,934	3,757	54,516	11,535	47,815	9,487	43,165	7,981
DENMARK	6,040	1,269	20,344	3,960	20,502	6,759	14,537	4,568	35,015	15,844
SWEDEN	12,988	5,356	40,352	17,718	26,116	11,522	20,141	9,464	33,437	7,969
PANAMA	8,010	3,275	43,748	18,019	1,152	423	1,152	423	23,291	11,200
GUATEMALA	-	-	6,169	2,823	11,837	6,578	6,458	3,934	17,214	7,656
SWITZERLAND	1,257	571	30,200	10,946	31,131	13,488	30,051	13,072	16,739	6,051
WEST INDIES	2,583	1,424	8,939	4,217	10,570	6,062	8,738	4,519	7,476	3,174
ARUBA	1,570	793	5,471	2,373	5,412	2,247	4,687	1,911	6,211	2,967
CHECQ REPUBLIQUE							-	-	5,911	935
NORWAY	-	-	-	-	101	59	72	38	2,072	655
MALAYSIA							-	-	44	16
HONG KONG	-	-	-	-	448	176	448	176	36	11
SAUDI ARABIA	-	-	195	74	-	-	-	-	31	8
OTHER	179,714	62,445	263,117	80,710	11,863	4,086	11,863	4086	20	8
TOTAL	705,701	644,099	3,604,227	2,699,335	3,326,901	1,118,512	2,917,712	974,528	2,549,275	879,358

Source: DANE, Cálculos Proexport. January 28, 2011.

TABLE 10, Colombian exports of P.A. 0810,90,10, per product
value (US\$) - kilograms (Kg)
2008-2010

Positon	Description	US\$ 2008	KG 2008	US\$ 2009	KG 2009	US\$ Jan - Nov 2009	KG JAN - NOV 2010	US\$ JAN - NOV 2010	KG JAN - NOV 2011
0810901030	Gulupa (Maracuya Morado) (Passiflora Edulis Varo Edulis), Frescas.	5,416,432	1,701,498	6,511,598	2,076,474	5,623,293	1,796,009	8,340,804	2,506,479
0810901010	Granadilla (Passiflora Ligularis), Frescas.	3,604,227	2,699,335	3,326,901	1,118,512	2,917,712	974,528	2,549,275	879,358
0810901020	Maracuya (Parchita) (Passif/Ora Edulis Varo Flavicarpa), Frescas.	564,417	280,964	376,806	132,582	352,291	123,867	329,690	112,502
0810901040	Curuba (Tumbo) (Passif/Ora Mo/Lisima), Frescas.	33,168	14,886	38,635	12,132	31,160	10,012	30,815	10,379
0810901090	Las Demas Frutas De La Pasion (Passiflora Spp.), Frescas.	12,900	3,678	53,340	22,719	50,281	21,902	6,478	3,918
Total general		9,631,144	4,700,360	10,307,280	3,362,418	8,974,737	2,926,319	11,257,064	3,512,636

Source: DANE, Cálculos Enero de 2011, Proexport.

As shown in table 10, Gulupa, passion fruit, banana exports and other passifloras have had large fluctuations, presenting a total of 3,512,636 kilograms exported in the year 2010,

3. Main aspects to be covered

The objective of the development is essentially to:

- Establish the minimum requirements of the passion fruit, which must be met regardless of the quality of the product category.
- Define the categories in which the passion fruit characteristics of appearance of the fruit can be classified.
- Consider the categories of caliber in which the passion fruits, depending on the equatorial diameter of the product, can be marketed.
- Establish standards of tolerance in terms of quality and caliber for passion fruits contained in a container.
- Include the provisions which must be taken into account with respect to the homogeneity of the packed product and the package used.
- The information which must be in the marking and labelling of the packaging, in accordance with the guidelines established by the Codex Alimentarius Commission.
- Include the guidelines established by the Codex Alimentarius Commission with regard to the pollutants that affect the fruit.
- Make reference to the Codex guidelines with regard to the requirements of hygiene for the handling of food products.

4. Assessment against the *Criteria for the establishment of work priorities*

It is necessary to develop a Standard for Passion Fruit with the aim of eliminating any obstacles to international trade and as a means to protect consumers from fraudulent practices.

The definition of the characteristics of the passion fruit also seeks to further protect the health of consumers.

5. Relevance to the Codex strategic objectives

The development of a Standard for Passion Fruit responds to the strategic objective which aims to promote the maximum application of the rules with a view to the internal regulations of countries and to facilitate international trade. Also the adoption of such standards can reduce the risks generated by the transmission of agents that have a negative impact on the health of the consumer

6. Information on the relation between the proposal and other existing Codex documents

The proposal for a Standard for Passion Fruit is part of the work of the Committee on Fresh Fruits and Vegetables.

7. Identification of any requirement for and availability of expert scientific advice

For the elaboration of the Draft Codex Standard, the information generated by the research group at the national level working in Colombia in the characterization of tropical fruit has been taken as a reference. Therefore if you require additional information to the one presented in the project, you have access to this group of experts.

8. Identification of any need for technical input to the Standard from external bodies so that this can be planned for

None

9. Proposed date for adoption at Step 5, and the proposed date for adoption by the Commission; the time frame for developing a Standard should not normally exceed five years

Start work	2011
Step 5	2013
Step 8	2014