經濟部標準檢驗局 下載帳號 bsmi 下載時間 2014/01/08 12:01:37 下載位置 172.17.50.185

表 1　以氣相層析儀測定植物油脂之脂肪酸組成

CNS	193	749	2242	2271	2832	3049	3527	4832	4833	4834	4835	4836	4837		7527	7528	14767	14768	14874	14875
脂肪酸組成	花生油	大豆油	米油	芥花油(低芥酸)	芝麻油	紅花籽油	玉米油	棉籽油	葵花籽油	椰子油	棕櫚仁油	棕櫚油	橄欖油	橄欖粕油	軟質棕油	硬質棕油	高油酸紅花籽油	高油酸葵花籽油	中油酸葵花籽油	葡萄籽油
C6:0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND-0.7	ND-0.8	ND	–	–	ND	ND	ND	ND	ND	ND
C8:0	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6-10.0	2.4-6.2	ND	–	–	ND	ND	ND	ND	ND	ND
C10:0	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0-8.0	2.6-5.0	ND	–	–	ND	ND	ND	ND	ND	ND
C12:0	ND-0.1	ND-0.1	ND-0.2	ND	ND	ND	ND-0.3	ND-0.2	ND-0.1	45.1-53.2	45.0-55.0	ND-0.5	ND	ND	0.1-0.5	0.1-0.5	ND-0.2	ND	ND	ND
C14:0	ND-0.1	ND-0.2	0.2-0.6	ND-0.2	ND-0.1	ND-0.2	ND-0.3	0.6-1.0	ND-0.2	16.8-21.0	14.0-18.0	0.5-2.0	≦0.05	≦0.05	0.5-1.5	1.0-2.0	ND-0.2	ND-0.1	ND-0.1	ND-0.3
C16:0	8.0-14.0	8.0-13.5	14-23	2.5-7.0	7.9-12.0	5.3-8.0	8.6-16.5	21.4-26.4	5.0-7.6	7.5-10.2	6.5-10.0	39.3-47.5	7.5-20.0	7.5-20.0	38.0-43.5	48.0-74.0	3.6-6.0	2.6-5.0	4.0-5.5	5.5-11.0
C16:1	ND-0.2	ND-0.2	ND-0.5	ND-0.6	ND-0.2	ND-0.2	ND-0.5	ND-1.2	ND-0.3	ND	ND-0.2	ND-0.6	0.3-3.5	0.3-3.5	ND-0.6	ND-0.2	ND-0.2	ND-0.1	ND-0.05	ND-1.2
C17:0	ND-0.1	ND-0.1	ND	ND-0.3	ND-0.2	ND-0.1	ND-0.1	ND-0.1	ND-0.2	ND	ND	ND-0.2	≦0.3	≦0.3	ND-0.2	ND-0.2	ND-0.1	ND-0.1	ND-0.05	ND-0.2
C17:1	ND-0.1	ND-0.1	ND	ND-0.3	ND-0.1	ND-0.1	ND-0.1	ND-0.1	ND-0.1	ND	ND	ND	≦0.3	≦0.3	ND-0.1	ND-0.1	ND-0.1	ND-0.1	ND-0.06	ND-0.1
C18:0	1.0-4.5	2.0-5.4	0.9-2.5	0.8-3.0	4.5-6.7	1.9-2.9	ND-3.3	2.1-3.3	2.7-6.5	2.0-4.0	1.0-1.3	3.5-6.0	0.5-5.0	0.5-5.0	3.5-5.0	3.9-6.0	1.5-2.4	2.9-6.2	2.1-5.0	3.0-6.5
C18:1	35.0-69.0	17.0-30.0	38-46	51.0-70.0	34.4-45.5	8.4-21.3	20.0-42.2	14.7-21.7	14.0-39.4	5.0-10.0	12.0-19.0	36.0-44.0	55.0-83.0	55.0-83.0	39.8-46.0	15.5-36.0	74.0-83.7	75.0-90.7	43.1-71.8	12.0-28.0
C18:2	12.0-43.0	48.0-59.0	29-40	15.0-30.0	36.9-47.9	67.8-83.2	34.0-65.6	46.7-58.2	48.3-74.0	1.0-2.5	1.0-3.5	9.0-12.0	3.5-21.0	3.5-21.0	10.0-13.5	3.0-10.0	9.0-19.9	2.1-17	18.7-45.3	58.0-78.0
C18:3	ND-0.3	4.5-11.0	0.1-2.9	5.0-14.0	0.2-1.0	ND-0.1	ND-2.0	ND-0.4	ND-0.5	ND-0.2	ND-0.2	ND-0.5	–	–	ND-0.6	ND-0.5	ND-1.2	ND-0.3	ND-0.5	ND-1.0
C20:0	1.0-2.0	0.1-0.6	ND-0.9	0.2-1.2	0.3-0.7	0.2-0.4	0.3-1.0	0.2-0.5	0.1-0.5	ND-0.2	ND-0.2	ND-1.0	≦0.6	≦0.6	ND-0.6	ND-0.1	0.3-0.6	0.2-0.5	0.2-0.4	ND-1.0
C20:1	0.7-1.7	ND-0.5	ND-0.8	0.1-4.3	ND-0.3	0.1-0.3	0.2-0.6	ND-0.1	ND-0.3	ND-0.2	ND-0.2	ND-0.4	≦0.4	≦0.4	ND-0.4	ND-0.4	0.1-0.5	0.1-0.5	0.2-0.3	ND-0.3
C20:2	ND	ND-0.1	ND	ND-0.1	ND	ND	ND-0.1	ND-0.1	ND	ND	ND	ND	–	–	ND	ND	ND	ND	ND	ND
C22:0	1.5-4.5	ND-0.7	ND-0.5	ND-0.6	ND-1.1	ND-1.0	ND-0.5	ND-0.6	0.3-1.5	ND	ND-0.2	ND-0.2	≦0.2	≦0.3	ND-0.2	ND-0.2	ND-0.4	0.5-1.6	0.6-1.1	ND-0.5
C22:1	ND-0.3	ND-0.3	ND	ND-2.0	ND	ND-1.8	ND-0.3	ND-0.3	ND-0.3	ND	ND	ND	ND	ND	ND	ND	ND-0.3	ND-0.3	ND	ND-0.3
C22:2	ND	ND	ND	ND-0.1	ND	ND	ND	ND-0.1	ND-0.3	ND	ND	ND	–	–	ND	ND	ND	ND	ND-0.09	ND
C24:0	0.5-2.5	ND-0.5	ND-0.6	ND-0.3	ND-0.3	ND-0.2	ND-0.5	ND-0.1	ND-0.5	ND	ND	ND	≦0.2	≦0.2	ND	ND	ND-0.3	ND-0.5	0.3-0.4	ND-0.4
C24:1	ND-0.3	ND	ND	ND-0.4	ND	ND-0.2	ND	ND	ND	ND	ND	ND	–	–	ND	ND	ND-0.3	ND	ND	ND

ND-未檢出，≦0.05%

附表二—1：橄欖原油自96年起至102年10月止進口之重量及價格

	年度	中文貨名	英文貨名	重量(公斤)	起岸價格(千元)	平均價格(元/公斤)
1	096年	橄欖原油	Virgin olive oil	663119	91,718	140
2	097年	橄欖原油	Virgin olive oil	752984	119,333	160
3	098年	橄欖原油	Virgin olive oil	879674	132,617	150
4	099年	橄欖原油	Virgin olive oil	1043857	148,715	140
5	100年	橄欖原油	Virgin olive oil	1371561	190,751	140
6	101年	橄欖原油	Virgin olive oil	1669361	222,160	130
7	102年 1月至10月	橄欖原油	Virgin olive oil	1355796	227,249	170

附表二—2：精製橄欖油及其餾分物自96年起至102年10月止進口之重量及價格

	年度	中文貨名	英文貨名	重量(公斤)	起岸價格(千元)	平均價格(元/公斤)
1	096年	精製橄欖油及其餾分物	Refined olive oil and its fractions	3096349	450,679	150
2	097年	精製橄欖油及其餾分物	Refined olive oil and its fractions	3131111	485,561	160
3	098年	精製橄欖油及其餾分物	Refined olive oil and its fractions	2653954	361,394	140
4	099年	精製橄欖油及其餾分物	Refined olive oil and its fractions	2654195	343,636	130
5	100年	精製橄欖油及其餾分物	Refined olive oil and its fractions	3980997	445,958	110
6	101年	精製橄欖油及其餾分物	Refined olive oil and its fractions	3982298	424,528	110
7	102年1月至10月	精製橄欖油及其餾分物	Refined olive oil and its fractions	3849045	505,902	130

附表二—3：葡萄籽油自98年起至102年止進口之重量及價格

	年度	英文貨名	淨重(公斤)	完稅價格(千元)	平均價格(元/公斤)
1	098年	AR202 GRAPE SEED OIL MASSAGE TREATMENT 500ML 葡萄籽油等	98888	10,594,886	107.14
2	099年	C2944 OIL (日清 純葡萄籽油) (內容量:460公克) EXP:2011.04.29等	86457	8,192,461	94.76
3	100年	6024 GRAPESEED OIL 6X1LT YIDU NR BRAND:MONTEVERDE (葡萄籽油1公升裝)等	84850	8,172,458	96.32
4	101年	C2944 OIL (日清 純葡萄籽油) (內容量:400公克) EXP:2013.05.08等	125733	14,321,947	113.91
5	102年	3936 WHITE GRAPE SEED OIL 1x25LT BRAND:MONTEVERDE (葡萄籽油25公升裝)等	3314	335,469	101.23

備註：整理自關務署所提供之葡萄籽油進口通關資料。

附表三：食用油品業者進口橄欖油、葡萄籽油之單價（元/公斤）

	廠商	A公司				B公司				C公司				D公司				E公司			
年度	月份	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡
96	1	147												204	194						
	2													206	188		146				
	3													193	181		149				
	4		131		109									200	186						
	5																				
	6													214	203		147				
	7	133	132																		
	8													199	186		152				
	9													200	187		153				
	10																				
	11	137			114										193		159				
	12				114									214							
97	1	141													214		160				
	2																				
	3													223							
	4													226	216		161				
	5													230	219		161				
	6													226	217		161				
	7	158	156		119									212	199		163				
	8																				
	9													204			157				
	10													197	184						
	11													189	177		144	130			
	12																				
98	1													204	191						
	2													193	181		222				
	3													190	179		151	170			
	4													191	179		157				
	5													187	174		153				
	6	108	108											192	180		157	190			
	7													194	182		159	140			
	8	107	107															230			
	9													199	187		162				
	10													201	189		164				
	11														201		164				
	12	113	113															152			
99	1													208	194		160				
	2													196	182						
	3				107									196	182		151				
	4													192	180			180			
	5													179	167		137	158			
	6																				

附表三：食用油品業者進口橄欖油、葡萄籽油之單價（元/公斤）

廠商	A公司				B公司				C公司				D公司				E公司			
年度	月份	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡
99	7													180	169		139	140			
	8													183	172						
	9				101									184	172		140	152			
	10																				
	11	107	103											192	180						
	12	103	99											170	168		138				
100	1													173	162						
	2													176	163		134				
	3													174	166		133	124			
	4													183	172		138				
	5													181				125			
	6													186							
	7				109									180	172		134				
	8	110												177			136	120			
	9													183	172		140				
	10		108															125			
	11		106											169	152						
	12																				
101	1													162	147		157				
	2													157	141		151	150			
	3	103	100											169	147		144				
	4													166	142		151	154			
	5													156	142						
	6		96															150			
	7	99	96											151	143		139				
	8																	150			
	9						88							154	139		142	150			
	10	70	93		96									153	129		140				
	11	99	94				110								136		138	150			
	12	99	94											156	142		149				
102	1	99	94							158				157	142						
	2																				
	3				103									162	150		153				
	4													159	148			178			133
	5							96													
	6													188							
	7		123		106									182	172						
	8		126				97							182							
	9									161											
	10	141												192	166						
	11																				
	12																				
平均		115	109		108		98.3	96		160				187	174		151	153			133

5家廠商「特橄」橄欖油之總平均：154

附表三：食用油品業者進口橄欖油、葡萄籽油之單價（元/公斤）

	廠商	A公司				B公司				C公司				D公司				E公司			
年度	月份	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡	特橄	精橄	殘渣	葡
5家廠商「精橄」橄欖油之總平均：127																					
5家廠商「殘渣」橄欖油之總平均： 96																					
5家廠商葡萄籽油之總平均　　：131																					

備註：「特橄」表示特級初榨橄欖油Extra Virgin Olive Oil
「精橄」表示精純橄欖油 Pure Olive Oil
「殘渣」表示橄欖殘渣油 Pomace Olive Oil
「葡」表示葡萄籽油
公司名稱詳偵卷之對照表

附表四：頂新公司自大統公司進貨明細

編號	收料日期	品名	包裝量	單位	實收數量	單價（桶或公斤）	單價（公斤）	金額
1	96/2/13	葡萄籽油	194	桶	30	18,430	95	552,900
2	96/7/27	葡萄籽油	194	桶	50	18,430	95	921,500
3	96/9/27	葡萄籽油	194	桶	80	18,430	95	1,474,400
4	97/4/1	橄欖油（綠）	1	KG	9,600	155	155	1,488,000
5	97/4/18	葡萄籽油	1	KG	12,804	105	105	1,344,420
6	97/6/6	葡萄籽油	1	KG	9,700	100	100	1,018,500
7	97/8/1	葡萄籽油	1	KG	11,640	100	100	1,222,200
8	97/8/1	橄欖油（綠）	1	KG	15,360	147	147	2,380,815
9	98/2/20	葡萄籽油	194	桶	80	18,430	95	1,474,400
10	98/5/22	葡萄籽油	194	桶	100	17,552	90	1,843,000
11	98/8/26	橄欖油（綠）	1	KG	7,680	120	120	921,600
12	99/1/18	葡萄籽油	194	桶	50	18,430	95	921,500
13	99/1/28	橄欖油（綠）	1	KG	14,784	135	135	1,995,840
14	99/6/15	葡萄籽油	194	桶	50	19,012	98	950,600
15	99/6/30	橄欖油（綠）	1	KG	15,360	135	135	2,073,600
16	99/12/17	葡萄籽油	194	桶	80	18,042	93	1,443,360
17	99/12/21	橄欖油（黃）	192	桶	40	20,928	109	837,120
18	100/3/15	橄欖油（黃）	192	桶	50	20,928	109	1,046,400
19	100/3/15	橄欖油（綠）	192	桶	30	20,928	109	627,840
20	100/3/24	橄欖油（黃）	192	桶	50	20,928	109	1,046,400
21	100/3/24	橄欖油（綠）	192	桶	30	20,928	109	627,840
22	100/11/19	橄欖油（黃）	192	桶	50	20,928	109	1,046,400
23	100/11/22	橄欖油（黃）	192	桶	100	20,928	109	2,092,800
24	100/12/1	橄欖油（黃）	192	桶	100	21,120	110	2,112,000
25	101/5/9	橄欖油（黃）	192	桶	35	19,008	99	665,280
26	101/5/9	橄欖油（綠）	192	桶	17	19,008	99	323,136
27	101/5/10	橄欖油（綠）	192	桶	28	19,008	99	532,224
28	102/1/18	葡萄籽油	194	桶	30	15,889	82	500,520
29	102/1/18	橄欖油（綠）	192	桶	10	17,920	93	188,160
30	102/3/1	橄欖油（綠）	192	桶	15	17,920	93	282,240
31	102/3/6	橄欖油（黃）	192	桶	25	17,920	93	470,400
32	102/6/6	葡萄籽油	194	桶	20	16,684	86	333,680
33	102/7/3	橄欖油（黃）	192	桶	50	18,816	98	940,800
34	102/7/26	橄欖油（黃）	192	桶	30	18,816	98	564,480
35	102/7/26	橄欖油（綠）	192	桶	30	18,816	98	564,480
36	102/8/13	葡萄籽油	194	桶	50	16,684	86	834,200
37	102/9/4	橄欖油（綠）	192	桶	40	18,816	98	752,640
38	102/9/6	橄欖油（黃）	192	桶	79	18,816	98	1,486,464
							合計：	39,902,139

資料來源：整理自頂新公司對象別原料採購收料明細表資料

備註1：金額欄所示金額均係含稅金額。

備註2：編號6、7、8、10、15、28~31之單價係未稅金額。

附表五：手工皂或化工業者訂購橄欖油或葡萄籽油之情形（96.1.1—102.11.6）

客戶編號	品名	數量	金額	包裝量/單位	備註
1	橄欖油（綠）	17	46,640	16KG桶	
2	橄欖油（皂用）	1	2,150	16KG桶	
3	葡萄籽油	1	2,160	16KG桶	
4	橄欖油（黃）	1	3,000	16KG桶	
5	橄欖油（黃）	5	10,750	16KG桶	
6	橄欖油（黃）	1	2,150	16KG桶	
7	橄欖油（綠）	4	10,880	16KG桶	
8	橄欖油（綠）	1	2,856	16KG桶	
9	葡萄籽油	2	3,900	16KG桶	
10	橄欖油（綠）	11	30,020	16KG桶	
11	橄欖油（黃）	2	5,500	16KG桶	
12	葡萄籽油	2	4,400	16KG桶	
13	葡萄籽油	1	1,850	16KG桶	
14	橄欖油（綠）	2	5,440	16KG桶	
15	葡萄籽油	1	2,050	16KG桶	
16	橄欖油（綠）	1	2,720	16KG桶	
17	橄欖油（黃）	7	19,500	16KG桶	
18	橄欖油（綠）	1	3,000	16KG桶	
19	橄欖油（綠）	1	2,468	16KG桶	
20	橄欖油（黃）	27	62,005	16KG桶	
21	橄欖油（黃）	1	26,208	192KG桶	
22	橄欖油（綠）	4	10,710	16KG桶	
23	橄欖油（綠）	6	15,300	16KG桶	
24	葡萄籽油	1	1,943	16KG桶	
25	橄欖油（黃）	25	53,750	16KG桶	
26	葡萄籽油	1	1,850	16KG桶	
27	橄欖油（黃）	1	2,258	16KG桶	
28	橄欖油（黃）	1	2,258	16KG桶	
29	橄欖油（綠）	15	41,020	16KG桶	
30	橄欖油（皂用）	2	4,700	16KG桶	
31	橄欖油（黃）	44	96,150	16KG桶	
32	葡萄籽油	22	44,760	16KG桶	
33	橄欖油（黃）	1	2,150	16KG桶	
34	葡萄籽油	1	2,150	16KG桶	
35	橄欖油（皂用）	2	4,700	16KG桶	
36	橄欖油（黃）	7	15,050	16KG桶	
37	葡萄籽油	1	1,850	16KG桶	
38	橄欖油（黃）	58	133,511	16KG桶	
39	葡萄籽油	12	23,946	16KG桶	
40	橄欖油（黃）	4	9,030	16KG桶	
41	葡萄籽油	2	3,886	16KG桶	
42	橄欖油（黃）	2	4,516	16KG桶	
43	橄欖油（綠）	2	5,500	16KG桶	
44	橄欖油（綠）	5	11,500	16KG桶	
45	橄欖油（黃）	12	26,550	16KG桶	

附表五：手工皂或化工業者訂購橄欖油或葡萄籽油之情形（96.1.1—102.11.6）

客戶編號	品名	數量	金額	包裝量/單位	備註
46	橄欖油（黃）	4	8,750	16KG桶	
47	橄欖油（綠）	1	2,468	16KG桶	
48	橄欖油（黃）	1	2,468	16KG桶	
49	橄欖油（綠）	1	2,300	16KG桶	
50	橄欖油（黃）	12	26,950	16KG桶	
51	橄欖油（綠）	1	2,000	16KG桶	
52	橄欖油（綠）	1	24,000	192KG桶	
53	橄欖油（綠）	1	2,800	16KG桶	
54	橄欖油（綠）	5	13,600	16KG桶	
55	橄欖油（綠）	12	31,690	16KG桶	
56	橄欖油（黃）	13	29,450	16KG桶	
57	葡萄籽油	22	42,000	16KG桶	
58	葡萄籽油	1	1,950	16KG桶	
59	葡萄籽油	7	13,915	16KG桶	
60	葡萄籽油	13	24,050	16KG桶	
61	橄欖油（綠）	15	35,290	16KG桶	
62	橄欖油（皂用）	10	20,500	16KG桶	
63	橄欖油（黃）	76	160,600	16KG桶	
64	葡萄籽油	8	15,100	16KG桶	
65	橄欖油（綠）	8	18,800	16KG桶	
66	橄欖油（黃）	1	2,350	16KG桶	
67	橄欖油（綠）	2	5,600	16KG桶	
68	葡萄籽油	1	2,250	16KG桶	
69	橄欖油（綠）	26	66,630	16KG桶	
70	橄欖油（黃）	1	2,150	16KG桶	
71	葡萄籽油	15	30,050	16KG桶	
72	橄欖油（綠）	10	22,900	16KG桶	
73	橄欖油（黃）	2	4,300	16KG桶	
74	葡萄籽油	4	7,400	16KG桶	
75	橄欖油（綠）	38	103,460	16KG桶	
76	橄欖油（黃）	21	46,550	16KG桶	
77	葡萄籽油	2	4,200	16KG桶	
78	橄欖油（綠）	3	8,160	16KG桶	
79	橄欖油（綠）	2	4,935	16KG桶	
80	橄欖油（黃）	2	4,935	16KG桶	
81	橄欖油（黃）	5	11,150	16KG桶	
82	橄欖油（綠）	1	2,800	16KG桶	
83	橄欖油（綠）	3	8,300	16KG桶	
84	橄欖油（黃）	1	2,750	16KG桶	
85	橄欖油（黃）	8	18,200	16KG桶	
86	葡萄籽油	1	1,950	16KG桶	
87	橄欖油（綠）	31	80,460	16KG桶	
88	橄欖油（皂用）	1	2,150	16KG桶	
89	橄欖油（黃）	2	5,000	16KG桶	
90	葡萄籽油	1	2,150	16KG桶	

附表五：手工皂或化工業者訂購橄欖油或葡萄籽油之情形（96.1.1—102.11.6）

客戶編號	品名	數量	金額	包裝量/單位	備註
91	橄欖油（綠）	4	10,800	16KG桶	
92	葡萄籽油	2	3,800	16KG桶	
93	橄欖油（綠）	462	1,254,740	16KG桶	
94	橄欖油（黃）	10	26,050	16KG桶	
95	橄欖油（黃）	1	23,184	192KG桶	
96	橄欖油	1	32,980	194KG桶	
97	葡萄籽油	44	92,680	16KG桶	
98	橄欖油（綠）	10	28,000	16KG桶	
99	橄欖油（綠）	4	11,808	16KG桶	
100	橄欖油（綠）	74	154,440	16KG桶	
101	橄欖油（黃）	76	154,380	16KG桶	
102	橄欖油（黃）	1	24,960	192KG桶	
103	葡萄籽油	7	12,350	16KG桶	
104	橄欖油（綠）	24	63,360	16KG桶	
105	橄欖油（黃）	8	19,840	16KG桶	
106	葡萄籽油	1	2,150	16KG桶	
107	橄欖油（綠）	1	2,770	16KG桶	
108	橄欖油（黃）	1	2,350	16KG桶	
109	橄欖油（綠）	2	5,540	16KG桶	
110	橄欖油（綠）	6	15,880	16KG桶	
111	橄欖油（黃）	3	7,050	16KG桶	
112	葡萄籽油	1	1,850	16KG桶	
113	橄欖油（綠）	4	10,880	16KG桶	
114	橄欖油（綠）	1	2,856	16KG桶	
115	橄欖油（皂用）	3	6,450	16KG桶	
116	葡萄籽油	1	1,850	16KG桶	
117	橄欖油（綠）	3	8,400	16KG桶	
118	橄欖油（皂用）	1	2,800	16KG桶	
119	橄欖油（黃）	2	4,500	16KG桶	
120	橄欖油（綠）	1	2,350	16KG桶	
121	橄欖油（綠）	3	6,450	16KG桶	
122	橄欖油（皂用）	1	2,150	16KG桶	
123	橄欖油（黃）	8	17,200	16KG桶	
124	橄欖油（綠）	20	44,600	16KG桶	
125	橄欖油（黃）	3	7,250	16KG桶	
126	橄欖油（黃）	1	2,350	16KG桶	
127	橄欖油（黃）	1	2,300	16KG桶	
128	橄欖油（綠）	3	8,220	16KG桶	
129	橄欖油（黃）	1	2,350	16KG桶	
130	橄欖油（綠）	2	5,520	16KG桶	
131	橄欖油（綠）	1	2,750	16KG桶	
132	葡萄籽油	1	1,850	16KG桶	
133	橄欖油（綠）	50	126,140	16KG桶	
134	橄欖油（皂用）	2	4,300	16KG桶	
135	橄欖油（黃）	10	22,970	16KG桶	

附表五：手工皂或化工業者訂購橄欖油或葡萄籽油之情形（96.1.1—102.11.6）

客戶編號	品名	數量	金額	包裝量/單位	備註
136	葡萄籽油	7	14,100	16KG桶	
137	橄欖油（黃）	4	8,600	16KG桶	
138	橄欖油（綠）	2	49,920	192KG桶	
139	葡萄籽油	1	2,150	16KG桶	
140	葡萄籽油	1	2,050	16KG桶	
141	橄欖油（黃）	1	2,350	16KG桶	
142	葡萄籽油	1	2,050	16KG桶	
143	橄欖油（黃）	1	2,150	16KG桶	
144	橄欖油（綠）	15	39,710	16KG桶	
145	橄欖油（皂用）	1	2,300	16KG桶	
146	橄欖油（黃）	70	165,710	16KG桶	
147	葡萄籽油	2	3,800	16KG桶	
148	橄欖油（綠）	53	146,160	16KG桶	
149	橄欖油（黃）	6	15,300	16KG桶	
150	葡萄籽油	3	6,540	16KG桶	
151	橄欖油（綠）	77	206,840	16KG桶	
152	橄欖油（皂用）	10	25,500	16KG桶	
153	橄欖油（黃）	434	957,840	16KG桶	
154	橄欖油（黃）	1	30,720	192KG桶	
155	葡萄籽油	2	4,310	16KG桶	
156	橄欖油（綠）	10	26,800	16KG桶	
157	橄欖油（綠）	1	2,820	16KG桶	
158	葡萄籽油	1	2,250	16KG桶	
159	橄欖油（綠）	1	2,720	16KG桶	
160	橄欖油（綠）	7	18,360	16KG桶	
161	橄欖油（皂用）	1	2,150	16KG桶	
162	橄欖油（黃）	1	30,720	192KG桶	
163	橄欖油（綠）	1	2,720	16KG桶	
164	橄欖油（黃）	3	6,900	16KG桶	
165	橄欖油（綠）	1	26,880	192KG桶	
166	橄欖油（綠）	5	11,750	16KG桶	
167	橄欖油（綠）	1	2,100	16KG桶	
168	橄欖油（黃）	8	17,200	16KG桶	
169	橄欖油（黃）	1	2,350	16KG桶	
170	橄欖油（黃）	1	2,150	16KG桶	
171	橄欖油（綠）	133	362,434	16KG桶	
172	橄欖油（黃）	37	98,440	16KG桶	
173	橄欖油（綠）	1	2,720	16KG桶	
174	橄欖油（綠）	6	15,560	16KG桶	
175	橄欖油（黃）	1	2,800	16KG桶	
176	葡萄籽油	5	97,970	194KG桶	
177	橄欖油（黃）	2	59,520	192KG桶	
178	葡萄籽油	3	64,020	194KG桶	
179	橄欖油（綠）	2	4,300	16KG桶	
180	葡萄籽油	13	284,210	194KG桶	

附表五：手工皂或化工業者訂購橄欖油或葡萄籽油之情形（96.1.1—102.11.6）

客戶編號	品名	數量	金額	包裝量/單位	備註
181	葡萄籽油	5	111,550	194KG桶	
182	橄欖油（綠）	1	2,720	16KG桶	
183	葡萄籽油	1	2,150	16KG桶	
184	橄欖油（綠）	1	2,500	16KG桶	
185	葡萄籽油	1	2,050	16KG桶	
186	橄欖油（綠）	1	2,800	16KG桶	
187	橄欖油（黃）	9	18,150	16KG桶	
188	葡萄籽油	13	24,900	16KG桶	
189	橄欖油（綠）	2	5,470	16KG桶	
190	橄欖油（黃）	2	5,100	16KG桶	
191	葡萄籽油	1	2,150	16KG桶	
192	橄欖油（黃）	1	3,045	16KG桶	
193	葡萄籽油	78	165,276	16KG桶	
194	橄欖油（綠）	3	8,290	16KG桶	
195	橄欖油（綠）	12	25,550	16KG桶	
196	橄欖油（黃）	10	21,000	16KG桶	
197	葡萄籽油	20	38,690	16KG桶	
198	橄欖油（綠）	2	4,700	16KG桶	
199	橄欖油（黃）	1	2,350	16KG桶	
200	橄欖油（綠）	2	4,300	16KG桶	
201	橄欖油（綠）	8	20,720	16KG桶	
202	橄欖油（黃）	1	2,150	16KG桶	
203	橄欖油（綠）	1	2,800	16KG桶	
204	橄欖油（黃）	1	2,100	16KG桶	
205	橄欖油（綠）	1	2,770	16KG桶	
206	葡萄籽油	3	59,170	194KG桶	
207	橄欖油（綠）	1	2,150	16KG桶	
208	葡萄籽油	1	1,950	16KG桶	
209	橄欖油（綠）	2	4,480	16KG桶	
210	橄欖油（綠）	2	5,400	16KG桶	
211	葡萄籽油	4	7,650	16KG桶	
212	橄欖油（皂用）	4	8,600	16KG桶	
213	橄欖油（黃）	64	128,650	16KG桶	
214	葡萄籽油	38	74,550	16KG桶	
215	橄欖油（綠）	6	16,400	16KG桶	
216	橄欖油（綠）	1	2,750	16KG桶	
217	橄欖油（黃）	28	58,200	16KG桶	
218	葡萄籽油	5	9,350	16KG桶	
219	橄欖油（綠）	1	2,530	16KG桶	
220	葡萄籽油	4	7,680	16KG桶	
221	葡萄籽油	1	2,150	16KG桶	
222	橄欖油（綠）	5	11,400	16KG桶	
223	橄欖油（黃）	35	71,650	16KG桶	
224	葡萄籽油	8	15,830	16KG桶	
225	橄欖油（黃）	1	2,400	16KG桶	

附表五：手工皂或化工業者訂購橄欖油或葡萄籽油之情形（96.1.1—102.11.6）

客戶編號	品名	數量	金額	包裝量/單位	備註
226	橄欖油（綠）	3	7,025	16KG桶	
227	橄欖油（黃）	1	2,100	16KG桶	
228	橄欖油（綠）	1	2,300	16KG桶	
229	橄欖油（黃）	1	2,200	16KG桶	
230	橄欖油（綠）	6	12,400	16KG桶	
231	橄欖油（黃）	1	2,100	16KG桶	
232	葡萄籽油	3	5,500	16KG桶	
233	橄欖油（綠）	1	2,180	16KG桶	
234	橄欖油（黃）	1	2,150	16KG桶	
235	葡萄籽油	1	1,900	16KG桶	
236	葡萄籽油	5	98,795	194KG桶	
237	葡萄籽油	2	44,100	200KG桶	
238	橄欖油（綠）	1	2,350	16KG桶	
239	葡萄籽油	1	1,950	16KG桶	
240	橄欖油（綠）	30	60,000	16KG桶	
241	橄欖油（綠）	2	4,250	16KG桶	
242	橄欖油（黃）	1	2,100	16KG桶	
243	橄欖油（綠）	1	2,350	16KG桶	
244	橄欖油（黃）	5	10,750	16KG桶	
		合計：	8,026,259		

*客戶名稱詳參偵卷對照表

附表六：頂新公司依附表四原油代工65品項油品銷售予味全公司之情形

編號	頂新公司產品名稱	客戶實收(瓶)	應收金額(元)	備註
1	0.38L橄欖多酚調合油	5,985	152,921	
2	0.75L黃金橄欖油	23,325	2,319,786	
3	0.75L葡萄籽油	92,286	8,972,564	
4	1.5L葡萄多酚橄欖健康油	82,369	8,435,382	
5	1.5L葡萄多酚橄欖健康油（方瓶）	2,160	170,622	
6	1.5L茶多酚橄欖健康油（紙盒）	213	12,797	
7	1.5L茶多酚橄欖健康油（NC）	162,669	15,735,902	
8	1.5L茶多酚橄欖健康油（方瓶）	27,698	2,181,800	
9	1.5L頂級橄欖多酚健康油	28,494	2,023,603	
10	1.5L頂級葡萄多酚健康油	17,273	1,223,545	
11	1.5L歐洲頂級橄欖蔬菜調合油	7,134	498,744	
12	1.5L歐洲頂級橄欖芥花調合油	6,160	432,748	
13	2L橄欖多酚健康油	2,172,745	206,283,342	
14	2L綠茶多酚健康油	325,495	31,655,489	
15	2L葡萄多酚健康油	452,144	42,536,909	
16	2L葡萄籽調合健康油	106,955	10,945,517	
17	2L不飽合橄欖精華調合健康油	175,022	17,457,106	
18	2LOMEGA3橄欖葡萄籽調合健康油	60,657	5,622,040	
19	2L味全健康三利多橄欖調合健康油	46,194	4,047,798	
20	2L味全健康三利多葡萄籽調合健康油	35,184	3,043,397	
21	2L不飽和橄欖芥花健康調合油	12,102	1,061,738	
22	2L不飽和橄欖葵花健康調合油	15,128	1,328,160	
23	2L橄欖珍饌寶健康調合油	7,286	666,040	
24	2L玄米珍饌寶健康調合油	4,882	434,410	
25	2L葵花珍饌寶健康調合油	4,900	435,479	
26	2L健康食用油	14,448	1,789,317	
27	2L平衡健康玄米調合油	12,625	1,821,348	
28	2.4L葡萄籽調合健康油	26,447	3,321,078	
29	2.9L西班牙嚴選葡萄籽精華調合油	11,518	1,379,912	
30	2.9L西班牙嚴選橄欖精華調合油	12,788	1,546,323	
31	3L橄欖葡萄籽健康油	444,060	57,456,398	
32	3L橄欖精華健康油	282,458	35,934,483	
33	3L不飽和橄欖精華調合健康油	129,074	18,673,734	
34	3L高溫安定頂級橄欖調合油	178,869	20,713,304	
35	3L高溫安定頂級葡萄籽調合油	158,908	19,295,620	
36	3L味全義式橄欖調合健康油	23,092	2,762,496	
37	3L味全義式葡萄籽調合健康油	18,051	2,170,365	
38	3L黃金葡萄籽菁華健康調合健康油	20,024	2,477,066	
39	3L橄欖茶多酚健康調合油	9,888	1,230,351	
40	3LOMEGA3黃金橄欖調和健康油	107,028	13,476,778	
41	3L不飽和義式調合油	16,700	2,387,701	
42	3L頂級御品調合油	12,375	1,834,640	
43	3L頂級雙果多酚調合油	13,522	1,977,722	
44	5L嚴選橄欖調合健康油	5,359	1,033,770	
45	1.5L健康廚房葡萄籽油	2,462	351,573	

附表六：頂新公司依附表四原油代工65品項油品銷售予味全公司之情形

編號	頂新公司產品名稱	客戶實收(瓶)	應收金額(元)	備註
46	2L味全紫果多酚調合油	155,755	15,221,543	
47	2L味全健康三利多嚴選調合油	27,444	2,774,298	
48	2L味全歐風黃金嚴選調合油	128,175	12,602,895	
49	3L味全珍饌寶嚴選調合油	71,246	9,911,963	
50	3L味全高溫安定嚴選調合油	105,512	14,770,295	
51	3L味全皇家莊園嚴選調合油	42,543	6,174,177	
52	3L味全義式嚴選調合油	17,504	2,590,851	
53	1.5L健康廚房橄欖油	2,432	389,537	
54	1.5L歐式優選調合油	91,344	7,760,119	
55	2L味全不飽和精華調合油	119,139	12,020,417	
56	2L味全綠果多酚調合油	285,766	28,005,709	
57	2L味全歐風黃金精華調合油	225,422	21,929,702	
58	2L味全御膳珍寶調合油	139,256	13,807,904	
59	2L味全健康三利多精華調合油	90,804	9,325,254	
60	3L味全御膳六寶調合油	110,094	16,200,646	
61	3L味全珍饌寶精華調合油	118,786	16,853,830	
62	3L味全高溫安定義式調合油	145,117	20,207,956	
63	3L味全皇家莊園精華調合油	67,280	9,803,701	
64	3L味全義式精華調合油	21,196	3,103,510	
65	3L味全好烹油雙果多酚調合油	67,093	8,684,350	
		合計：	791,450,475	

附表七：橄欖油、葡萄籽油棕櫚酸(C16：0)比例不合格之情形

編號	檔名	原料入貨日期	棕櫚酸(C16：0)之比例	CNS標準	備註1	備註2
1	大統長基葡萄籽油	97.8.1	20.1541	5.5—11	不合格	樣品
2	97.10.28-2葡	未知	2.518	5.5—11	不合格	未知
3	98.02.27-2葡測試(6.5：3.5)	未知	25.8115	5.5—11	不合格	未知
4	98.08.26-大統長基橄欖油	98.8.26	5.5943	7.5—20	不合格	原料油
5	98.11.20-橄欖油	未知	6.2072	7.5—20	不合格	未知
6	99.01.20-橄(大統)	99.1.28	7.154	7.5—20	不合格	樣品
7	99.01.22-橄欖油	99.1.28	6.858	7.5—20	不合格	樣品
8	99.01.26-2橄	未知	34.5773	7.5—20	不合格	未知
9	99.01.27-綠色橄欖油入貨	99.1.28	6.7353	7.5—20	不合格	樣品
10	99.01.27-橄欖油入貨	99.1.28	6.7353	7.5—20	不合格	樣品
11	99.12.13-大統長基olive-sample	99.12.21	6.531	7.5—20	不合格	樣品
12	99.12.22-大統長基olive	99.12.21	5.572	7.5—20	不合格	原料油
13	100.03.09-橄欖油(黃)	100.3.15	6.5	7.5—20	不合格	樣品
14	100.03.09-橄欖油(綠)	100.3.15	6.246	7.5—20	不合格	樣品
15	100.03.15-大統長基-olive-y	100.3.15	6.762	7.5—20	不合格	原料油
16	100.03.15-大統長基olive-g	100.3.15	6.485	7.5—20	不合格	原料油
17	100.03.24-綠橄欖-大統長基	100.3.24	6.353	7.5—20	不合格	原料油
18	100.03.25-橄欖大統長基	100.3.24	6.963	7.5—20	不合格	原料油
19	100.09.02-750ML 橄欖	未知	6.777	7.5—20	不合格	未知
20	100.11.18-橄欖油(黃)	100.11.19	6.5	7.5—20	不合格	樣品
21	100.11.23-750ML 橄欖	未知	7.055	7.5—20	不合格	未知
22	100.11.24-750ML 橄欖	未知	7.053	7.5—20	不合格	未知
23	100.12.06-750ML 橄欖	未知	6.77	7.5—20	不合格	未知
24	101.05.09-橄欖油(黃)	101.5.9	6.929	7.5—20	不合格	原料油
25	102.01.18-大統長基橄欖油(綠)	102.1.18	7.279	7.5—20	不合格	原料油

資料來源：整理自頂新公司屏東廠品管組氣相層析儀連接之檢驗檔案資料

附表八：葡萄籽油亞麻油酸(C18：2)比例不合格之情形

編號	檔名	原料入貨日期	亞麻油酸(C18：2)之比例	CNS標準	備註1	備註2	指認人
1	大統長基葡萄籽油-97.07.08	97.8.1	56.2971	58—78	不合格	樣品	賴
2	97.09.05-750葡TEST2	未知	57.572	58—78	不合格	未知	賴
3	102.10.22-大統葡萄籽油	未知	56.913	58—78	不合格	未知	賴

資料來源：整理自頂新公司屏東廠品管組氣相層析儀連接之檢驗檔案資料

附表九—1：原料品質檢驗表不合格之情形（棕櫚酸）

編號	品名	原料入貨日期	棕櫚酸(C16：0)之比例	CNS標準	備註
1	橄欖油	99.1.27	6.7353	7.5—20	不合格
2	橄欖油（綠）	99.6.30	6.386	7.5—20	不合格
3	橄欖油	99.11.20	6.2072	7.5—20	不合格
4	橄欖油	99.12.21	7.072	7.5—20	不合格
5	橄欖油	100.3.15	6.815	7.5—20	不合格
6	橄欖油（綠）	100.3.15	6.485	7.5—20	不合格
7	橄欖油（綠）	100.3.24	6.353	7.5—20	不合格
8	橄欖油	100.3.24	6.963	7.5—20	不合格
9	橄欖油	100.11.18	6.998	7.5—20	不合格
10	橄欖油	100.11.22	6.998	7.5—20	不合格
11	橄欖油	100.12.2	6.968	7.5—20	不合格
12	橄欖油	101.5.9	6.929	7.5—20	不合格

附表九—2：原料品質檢驗表不合格之情形（芥酸）

編號	品名	原料入貨日期	芥酸(C22：1)之比例	CNS標準	備註
1	橄欖油	100.3.15	0.584	未檢出	不合格
2	橄欖油（綠）	100.3.15	0.517	未檢出	不合格
3	橄欖油（綠）	100.3.24	0.499	未檢出	不合格
4	橄欖油	100.3.24	0.503	未檢出	不合格
5	橄欖油	100.12.2	0.429	未檢出	不合格
6	橄欖油	101.5.9	0.618	未檢出	不合格
7	橄欖油（綠）	101.5.9	0.56	未檢出	不合格
8	橄欖油（綠）	102.1.18	0.78	未檢出	不合格

附錄二

【本判決卷證代號對照表】

一、本案卷

代　　號	卷　宗　名　稱
本院卷 1 至 5	智慧財產法院 106 年度刑智上易字第 48 號（卷 1）至（卷 5）

二、本案一審卷

代　　號	卷　宗　名　稱
G1-G9	臺灣屏東地方法院檢察署 102 年度他字第 1652 號（卷 1）至（卷 9）
G10	臺灣屏東地方法院檢察署 102 年度他字第 1662 號
G11	臺灣屏東地方法院檢察署 102 年度聲押字第 248 號
G12	臺灣屏東地方法院 102 年度聲羈字第 246 號
G13	臺灣屏東地方法院檢察署 102 年度押抗字第 9 號
G14	臺灣高等法院高雄分院 102 年度偵抗字第 171 號
G15	臺灣屏東地方法院檢察署 103 年度聲他字第 1 號
G16	臺灣屏東地方法院檢察署 103 年度偵字第 725 號
G17	臺灣屏東地方法院檢察署 103 年度偵字第 3785 號
G18(18-1 至 18-6)	臺灣屏東地方法院 103 年度易字第 739 號（卷 1 至卷 6）

三、味全關聯案起訴案卷

代　　號	卷　宗　名　稱
A1-A8	臺灣臺北地方法院檢察署 102 年度偵字第 22243 號（卷 1）至（卷 8）
A9-A10	臺灣臺北地方法院檢察署 102 年度偵字第 22243 號（辯護人陳報狀卷 1）至（卷 2）
A11-A27	臺灣臺北地方法院檢察署 102 年度偵字第 22243 號(資料卷 A 至資料卷 Q)
B1	臺灣臺北地方法院檢察署 103 年度偵字第 367 號
B2	臺灣臺北地方法院檢察署 103 年度偵字第 8945 號
B3	臺灣臺北地方法院檢察署 103 年度偵字第 10646 號
B4	臺灣臺北地方法院檢察署 103 年度偵字第 10647 號
C1	臺灣臺北地方法院檢察署 102 年度他字第 10310 號
C2	臺灣臺北地方法院檢察署 102 年度他字第 10547 號

C3	臺灣屏東地方法院檢察署 103 年度他字第 56 號
C4	臺灣臺北地方法院檢察署 103 年度他字第 1504 號
D1	臺灣臺北地方法院檢察署 102 年度警聲搜字第 1897 號
D2	臺灣臺北地方法院 102 年度聲羈字第 347 號
D3	臺灣臺北地方法院檢察署 102 年度押抗字第 9 號
D4	臺灣高等法院 102 年度偵抗字第 1295 號
D5	臺灣臺北地方法院檢察署 102 年度逕搜字第 2 號
D6	臺灣臺北地方法院檢察署 102 年度聲搜字第 38 號

四、味全關聯案追加起訴案卷

代　　號	案　卷　名　稱
E1	臺灣臺北地方法院檢察署 103 年度偵字第 21907 號
F1-F7	臺灣臺北地方法院檢察署 103 年度他字第 9914 號（卷 1）至（卷 7）
F8	臺灣臺北地方法院檢察署 103 年度他字第 10070 號

五、味全關聯案一審案卷

代　　號	案　卷　名　稱
甲 1-甲 28	臺灣臺北地方法院 103 年度金重訴字第 21 號（卷 1）至（卷 28）【味全關聯案案起訴繫屬案卷】
乙 1-乙 6	臺灣臺北地方法院 103 年度智易字第 98 號（卷 1）至（卷 6）【味全關聯案追加起訴繫屬案卷】

六、味全關聯案二審案卷

代　　號	案　卷　名　稱
丙 1-丙 19	智慧財產法院 105 年度刑智上易字第 38 號（卷 1）至（卷 19）

附件1　頂新公司、味全公司油品相關購入、銷售明細及單價之走勢比較

頂新公司向大統公司購入之「橄欖油」、「葡萄籽油」之明細及單價

品　名	大統公司 銷貨日期	頂新公司 收料日期	數量 (1)	含稅單價 (2)	含稅金額 (3)=(1)*(2)	每公斤單價 (4)=(2)/192或194
特級橄欖油(綠)192Kg	2008-03-29	2008-04-01	50	29,760	1,488,000	155.00
特級橄欖油(綠)192Kg	2008-07-31	2008-08-01	80	29,760.19	2,380,815	155.00
特級橄欖油(綠)192Kg	2009-08-25	2009-08-26	40	23,040	921,600	120.00
特級橄欖油(綠)192Kg	2010-01-26	2010-01-28	77	25,920	1,995,840	135.00
特級橄欖油(綠)192Kg	2010-06-29	2010-06-30	50	25,920	1,296,000	135.00
特級橄欖油(綠)192Kg	2010-06-29	2010-06-30	30	25,920	777,600	135.00
特級橄欖油(黃)192Kg	2010-12-20	2010-12-21	40	20,928	837,120	109.00
特級橄欖油(綠)192Kg	2011-03-14	2011-03-15	30	20,928	627,840	109.00
特級橄欖油(黃)192Kg	2011-03-14	2011-03-15	50	20,928	1,046,400	109.00
特級橄欖油(綠)192Kg	2011-03-23	2011-03-24	30	20,928	627,840	109.00
特級橄欖油(黃)192Kg	2011-03-23	2011-03-24	50	20,928	1,046,400	109.00
特級橄欖油(黃)192Kg	2011-11-17	2011-11-19	50	20,928	1,046,400	109.00
特級橄欖油(黃)192Kg	2011-11-22	2011-11-22	50	20,928	1,046,400	109.00
特級橄欖油(黃)192Kg	2011-11-22	2011-11-22	50	20,928	1,046,400	109.00
特級橄欖油(黃)192Kg	2011-12-01	2011-12-01	100	21,120	2,112,000	110.00
特級橄欖油192Kg	2012-05-03	退貨	80	19,008	1,520,640	99.00
特級橄欖油192Kg	2012-05-04		(80)	19,008	(1,520,640)	99.00
特級橄欖油(綠)192Kg	2012-05-08	2012-05-09	17	19,008	323,136	99.00
特級橄欖油(黃)192Kg	2012-05-08	2012-05-09	35	19,008	665,280	99.00
特級橄欖油(綠)192Kg	2012-05-09	2012-05-10	28	19,008	532,224	99.00
特級橄欖油(綠)192Kg	2013-01-16	2013-01-18	50	18,816	940,800	98.00
特級橄欖油(綠)192Kg	2013-01-21	2013-01-18	(40)	18,816	(752,640)	98.00
特級橄欖油(綠)192Kg	2013-01-28	2013-03-01	(10)	18,816	(188,160)	98.00
特級橄欖油192Kg	2013-01-28	退貨	(15)	19,008	(285,120)	99.00
特級橄欖油192Kg	2013-02-27		15	19,008	285,120	99.00
特級橄欖油(綠)192Kg	2013-02-27	2013-03-01	25	18,816	470,400	98.00
特級橄欖油(黃)192Kg	2013-03-05	2013-03-06	25	18,816	470,400	98.00
特級橄欖油192Kg	2013-06-04	退貨	50	18,816	940,800	98.00
特級橄欖油192Kg	2013-06-18		50	18,816	940,800	98.00
特級橄欖油192Kg	2013-06-20		(50)	18,816	(940,800)	98.00
特級橄欖油192Kg	2013-07-04		(50)	18,816	(940,800)	98.00
特級橄欖油(黃)192Kg	2013-07-02	2013-07-03	50	18,816	940,800	98.00
進口葡萄籽油194Kg	2007-02-12	2007-02-13	30	18,430	552,900	95.00
進口葡萄籽油194Kg	2007-07-26	2007-07-27	50	18,430	921,500	95.00
進口葡萄籽油194Kg	2007-09-26	2007-09-27	80	18,430	1,474,400	95.00
進口葡萄籽油194Kg	2008-04-17	2008-04-18	66	20,370	1,344,420	105.00
進口葡萄籽油194Kg	2008-06-05	2008-06-06	50	20,370	1,018,500	105.00
進口葡萄籽油194Kg	2008-07-31	2008-08-01	60	20,370	1,222,200	105.00
進口葡萄籽油194Kg	2009-02-19	2009-02-20	80	18,430	1,474,400	95.00
進口葡萄籽油194Kg	2009-05-21	2009-05-22	50	18,430	921,500	95.00
進口葡萄籽油194Kg	2009-05-21	2009-05-22	50	18,430	921,500	95.00
進口葡萄籽油194Kg	2010-01-14	2010-01-18	50	18,430	921,500	95.00
進口葡萄籽油194Kg	2010-06-14	2010-06-15	50	19,012	950,600	98.00
進口葡萄籽油194Kg	2010-12-16	2010-12-17	80	18,042	1,443,360	93.00
進口葡萄籽油194Kg	2013-01-16	2013-01-18	30	16,684	500,520	86.00
進口葡萄籽油194Kg	2013-06-04	2013-06-06	20	16,684	333,680	86.00
進口葡萄籽油194Kg	2013-08-10	2013-08-13	50	16,684	834,200	86.00
橄欖油(黃)192Kg	2013-07-25	2013-07-26	30	18,816	564,480	98.00
橄欖油(綠)192Kg	2013-07-25	2013-07-26	30	18,816	564,480	98.00
橄欖油(綠)192Kg	2013-09-02	2013-09-04	40	18,816	752,640	98.00
橄欖油(黃)192Kg	2013-09-05	2013-09-06	50	18,816	940,800	98.00
橄欖油192Kg	2013-09-05	2013-09-06	30	18,816	564,480	98.00
橄欖油192Kg	2013-09-06	2013-09-06	(1)	18,816	(18,816)	98.00

資料來源卷頁：大統公司歷史交易紀錄表、頂新公司97-102年向大統公司採購橄欖油、葡萄籽油之採購收料明細表等（分見A11卷第72頁反面-74頁、A12卷第121-123頁、G5卷第89頁、G1卷第50-55頁）。

附件2　頂新製油與福懋公司向大統公司採購橄欖油單價之比較表
（丙11卷第53頁背面-54頁）

頂新公司向大統公司採購橄欖油之資料[1]		福懋公司向大統公司採購橄欖油之資料[2]		福懋向大統公司採購之價格是否較頂新低？
銷貨日期	每公斤單價（含稅）	單據日期或驗收日期[3]	福懋公司向大統公司採購之單價(元/公斤)	
097/03/29	147.62	097/04/14	138.095	✓
097/07/31	147.62	097/08/14	138.095	✓
098/08/25	120	098/09/24	103.8097	✓
099/01/26	135	099/01/25	103.8096	✓
099/06/29	135	099/09/09	94.2857	✓
099/12/20	109	099/11/23	94.2857	✓
100/03/14	109	100/03/31	94.2857	✓
100/03/23	109	100/03/31	94.2857	✓
100/11/17	109	100/11/14	94.2857	✓
100/11/22	109	100/11/14	94.2857	✓
100/11/22	109	100/11/14	94.2857	✓
100/12/01	110	100/12/19	94.2857	✓
101/05/03	99	101/05/10	94.2857	✓
101/05/04	99	101/05/10	94.2857	✓
101/05/08	99	101/05/10	94.2857	✓
101/05/09	99	101/05/10	94.2857	✓
102/01/16	98	102/01/24	94.2857	✓
102/01/21	98	102/01/24	94.2857	✓
102/01/28	98	102/01/24	94.2857	✓
102/01/28	99	102/01/24	94.2857	✓
102/02/27	99	102/01/24	94.2857	✓
102/02/27	98	102/01/24	94.2857	✓
102/03/05	98	102/04/01	94.2857	✓
102/06/04	98	102/06/07	94.2857	✓
102/06/18	98	102/06/07	94.2857	✓
102/06/20	98	102/06/07	94.2857	✓
102/07/02	98	102/07/30	94.2857	✓
102/07/04	98	102/07/30	94.2857	✓
102/07/25	98	102/07/30	94.2857	✓
102/09/02	98	102/09/18	92.381	✓

[1]資料來源：另案起訴書附表二

[2]資料來源:智慧財產法院103年度重附民字第1號法院卷第126至128頁福懋公司橄欖油油之進貨明細表。

[3] 取與頂新公司向大統採購日期相近之價格作為比較。

頂新公司向大統公司採購橄欖油之資料[1]		福懋公司向大統公司採購橄欖油之資料[2]		福懋向大統公司採購之價格是否較頂新低？
銷貨日期	每公斤單價（含稅）	單據日期或驗收日期[3]	福懋公司向大統公司採購之單價(元/公斤)	
102/09/05	98	102/09/18	92.381	✓
102/09/05	98	102/09/18	92.381	✓
102/09/06	98	102/09/18	92.381	✓

附件3：頂新製油向大統長基訂購PURE橄欖油時間點與世界油脂（Oil World）換算PURE橄欖油價格表（G16卷第45-59頁）

頂新製油向大統長基訂購PURE橄欖油時間點vs.世界油脂(Oil World)換算PURE橄欖油價格

Oil World EV-西班牙		EV換算方式 EV NTD/KG * 98% = PURE					頂新製油 實際向大統採購PURE				Oil World行情換算vs頂新採購時點價格 (以未稅價比較)
價格 美元/噸	價格時間點	匯率	EV-新台幣元/KG	PURE-新台幣元/KG EV*98%	相關費用進貨價格*3%	加計供應商利益*2%之國內合理價格 (不含營業稅)	訂購時間點	出貨截止日	採購價格含稅-新台幣元/kg	採購價格未稅-新台幣元/KG	
5,000	2006.02	33	163	159	164	167			149	142	-15.2%
4,769	2006.03	33	155	152	157	160	2006/3/23	2006/3/23	149	142	-11.1%
4,313	2006.04	33	140	137	141	144			149	142	-1.7%
4,076	2006.05	32	129	126	130	133	2006/5/16	2006/10/27	150	143	7.7%
3,921	2006.06	33	127	125	129	131			150	143	8.9%
4,019	2006.07	32	131	128	132	134	2006/7/13	2008/4/1	150	143	6.3%
4,088	2008.03	32	131	128	132	135			155	148	9.6%
3,936	2008.04	30	119	117	120	123	2008/4/2	2008/8/1	155	148	20.2%
3,704	2008.07	32	119	116	120	122			155	148	21.0%
3,503	2008.08	32	111	108	112	114	2008/8/4	2008/8/26	155	148	29.7%
3,503	2008.08	32	111	108	112	114	2008/8/27		120	114	0.4%
3,002	2009.12	34	101	99	102	104			135	129	24.2%
3,011	2010.01	32	96	94	97	99	2010/1/12		135	129	30.5%
2,475	2010.06	31	77	75	78	79	2010/6/30	2010/6/30	135	129	62.1%
2,711	2010.12	30	81	79	82	83	2010/12/22		109	104	24.5%
2,764	2011.02	30	82	81	83	85			109	104	22.6%
2,796	2011.03	30	83	81	83	85	2011/3/16	2011/11/22-綠 2011/12/1-黃	109	104	22.0%
2,680	2011.11	30	81	80	82	84			110	105	25.1%
2,506	2011.12	30	75	74	76	77	2011/12/2	2012/5/9	110	105	35.4%
2,321	2012.04	29	68	66	68	70			99	94	35.4%
2,241	2012.05	29	66	64	66	68	2012/5/10		99	94	39.4%
3,287	2012.10	29	96	94	97	99			98	93	-5.6%
3,177	2012.11	29	92	91	93	95	2012/11/4		98	93	-1.9%

說明：

1 EV=Extra Virgin
2. Oil World 價格為美元/噸，依當時滙率換算為每公斤新台幣價格，再加上3%相關費用(如報關費、拖車費與卸工費等等)，再加上進口商利潤2%，得出國內合理價格(不含營業稅)
3. 頂新製油向大統長基訂購時即已敲定數量及價格，再一批或分批出貨，而大統長基實際出貨時才開發票並請款。

Oil World橄欖油歷史行情換算表

單位：NTD/KG

年度	月份	Oil World EV 行情 (美元/噸) 1	匯率	EV進口單價	換算PURE進口單價	相關費用	在國內購買pure之合理價格 台幣元/1KG
				台幣/KG	EV進口單價 * 98%	銀行/報關/拖車與卸工等費用約3%	(加計進口商利潤2%)
2006	一月	5,121	32.50	166	163	168	171
2006	二月	5,000	32.50	163	159	164	167
2006	三月	4,769	32.52	155	152	157	160
2006	四月	4,313	32.50	140	137	141	144
2006	五月	4,076	31.60	129	126	130	133
2006	六月	3,921	32.50	127	125	129	131
2006	七月	4,019	32.49	131	128	132	134
2006	八月	4,087	32.50	133	130	134	137
2006	九月	3,671	32.50	119	117	120	123
2006	十月	3,446	32.50	112	110	113	115
2006	十一月	3,423	32.50	111	109	112	115
2006	十二月	3,283	32.50	107	105	108	110
2007	一月	3,245	32.50	105	103	106	109
2007	二月	3,363	32.50	109	107	110	113
2007	三月	3,580	32.50	116	114	117	120
2007	四月	3,657	32.50	119	116	120	122
2007	五月	3,448	32.50	112	110	113	115
2007	六月	3,218	32.50	105	102	106	108
2007	七月	3,258	32.50	106	104	107	109
2007	八月	3,202	32.50	104	102	105	107
2007	九月	3,355	32.50	109	107	110	112
2007	十月	未找到資料	32.50				
2007	十一月	3,880	32.50	126	124	127	130
2007	十二月	3,834	32.50	125	122	126	128
2008	一月	3,894	32.00	125	122	126	128
2008	二月	3,883	32.00	124	122	125	128
2008	三月	4,088	32.00	131	128	132	135
2008	四月	3,936	30.32	119	117	120	123
2008	五月	3,718	32.00	119	117	120	122
2008	六月	3,697	32.00	118	116	119	122
2008	七月	3,704	32.00	119	116	120	122
2008	八月	3,503	31.55	111	108	112	114
2008	九月	3,322	32.00	106	104	107	109
2008	十月	3,047	32.00	98	96	98	100
2008	十一月	2,779	32.00	89	87	90	92
2008	十二月	2,825	32.00	90	89	91	93
2009	一月	2,609	33.50	87	86	88	90
2009	二月	2,557	33.50	86	84	86	88
2009	三月	2,466	33.50	83	81	83	85
2009	四月	2,411	33.50	81	79	82	83
2009	五月	2,397	33.50	80	79	81	83
2009	六月	2,621	33.50	88	86	89	90
2009	七月	2,810	33.50	94	92	95	97
2009	八月	3,327	33.50	111	109	113	115
2009	九月	3,665	33.50	123	120	124	126
2009	十月	3,615	33.50	121	119	122	125
2009	十一月	3,259	33.50	109	107	110	112
2009	十二月	3,002	33.50	101	99	102	104
2010	一月	3,011	31.78	96	94	97	99
2010	二月	2,912	31.00	90	88	91	93

年度	月份	Oil World EV 行情 (美元/噸) 1	匯率	EV進口單價	換算PURE進口單價	相關費用	在國內購買pure之合理價格台幣元/1KG
				台幣/KG	EV進口單價 * 98%	銀行/報關/拖車與卸工等費用約3%	(加計進口商利潤2%)
2010	三月	2,925	31.00	91	89	92	93
2010	四月	2,896	31.00	90	88	91	92
2010	五月	2,629	31.00	81	80	82	84
2010	六月	2,475	31.13	77	75	78	79
2010	七月	2,556	31.00	79	78	80	82
2010	八月	2,570	31.00	80	78	80	82
2010	九月	2,625	31.00	81	80	82	84
2010	十月	2,770	31.00	86	84	87	88
2010	十一月	2,770	31.00	86	84	87	88
2010	十二月	2,711	29.88	81	79	82	83
2011	一月	2,591	29.30	76	74	77	78
2011	二月	2,764	29.75	82	81	83	85
2011	三月	2,796	29.56	83	81	83	85
2011	四月	2,857	28.76	82	81	83	85
2011	五月	2,841	28.77	82	80	83	84
2011	六月	2,803	28.80	81	79	81	83
2011	七月	2,738	28.89	79	78	80	81
2011	八月	2,759	29.02	80	78	81	82
2011	九月	2,646	30.51	81	79	81	83
2011	十月	2,601	29.93	78	76	79	80
2011	十一月	2,680	30.35	81	80	82	84
2011	十二月	2,506	29.98	75	74	76	77
2012	一月	2,304	29.58	68	67	69	70
2012	二月	2,383	29.38	70	69	71	72
2012	三月	2,378	29.51	70	69	71	72
2012	四月	2,321	29.14	68	66	68	70
2012	五月	2,241	29.32	66	64	66	68
2012	六月	2,222	29.88	66	65	67	68
2012	七月	2,243	29.99	67	66	68	69
2012	八月	2,738	29.93	82	80	83	84
2012	九月	3,261	29.30	96	94	96	98
2012	十月	3,287	29.22	96	94	97	99
2012	十一月	3,177	29.09	92	91	93	95
2012	十二月	3,247	29.14	95	93	95	97
2013	一月	3,844	29.58	114	111	115	117
2013	二月	3,936	29.71	117	115	118	120
2013	三月	3,811	29.85	114	111	115	117
2013	四月	3,770	29.62	112	109	113	115
2013	五月	3,586	30.06	108	106	109	111
2013	六月	3,706	30.12	112	109	113	115
2013	七月	3,560	30.10	107	105	108	110

說明：

1. 依世界油脂(Oil World)所載Extra Virgin橄欖油行情計算
2. EV=Extra Virgin
3. Pure合理價格計算方式說明：
   依Oil World所載Extra Virgin橄欖油每噸美元之價格，依當時滙率計算出Extra Virgin每公斤台幣價格，再依pure價格為Extra Virgin 的98%，計算出pure等級每公斤台幣合理進口價格。再以pure的合理進口單價加計3%報關、拖車與卸工等費用，然後再加計2%進口商利潤，得出在國內購買pure之每公斤新台幣合理價格。

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OIL WORLD Weekly

World Supply, Demand and Price Forecasts for Oilseeds, Oils and Meals

C 26193

No. 2, Vol. 54 14 January 2011

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Supply

Demand

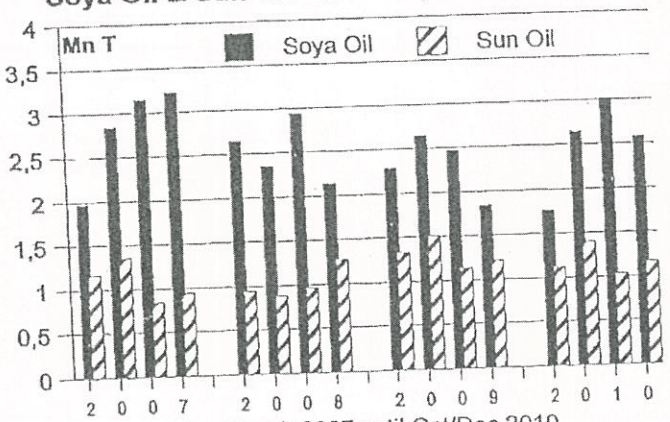
Prices

Highlights of this Issue

● This week the USDA lowered the 2010 US corn crop by 2.4 Mn T and soybeans by 1.2 Mn T. US soybean and corn stocks are likely to fall to critically low levels by the end of this season.

● The lower US crops come on top of the anticipated crop losses in Argentina and this has raised the upward potential for prices in the near to medium term.

Soya Oil & Sun Oil: Quarterly World Exports



Jan/March 2007 until Oct/Dec 2010

● World exports of sun oil were higher than expected at 1.17 Mn T in Oct/Dec 2010 and thus only 4% below the year earlier, despite sizably reduced sunflowerseed production in several northern-hemisphere countries.

● World soya oil exports increased to a 3-year high of 2.6 Mn T in Oct/Dec 2010 and were up steeply by 40% from a year earlier, benefiting from reduced world supplies and exports of palm oil.

● Soybean demand recovered in the EU-27 with processing increasing 18% in Oct/Nov 2010. Rapeseed crushings declined by 7%.

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ALL ITEMS AT A GLANCE

US crop sizes revised downward: The USDA lowered the 2010 soybean crop estimate by as much as 1.2 Mn T to only 90.6 Mn T, compared to 94.8 Mn T expected in early Sept. This will require some demand rationing in the further course of the season. Crushings may be curbed to 45.8 Mn T in 2010/11, down 1.9 Mn T. Soybean stocks may be reduced severely to only 3.4 Mn T by end-Aug 2011. The lower US crops together with the anticipated crop losses in Argentina has raised the upward potential for prices. (12)

Soya oil: We estimate world exports of soya oil at 738 Thd T in December compared with 935 Thd T a month and 638 Thd T a year earlier. Argentine soya oil exports to China were resumed in October with 38 Thd T shipped, followed by 59 Thd T in November. The USA exported 85 Thd T of soya oil to China in December.The sharp decline in domestic biodiesel production resulted in a sizable reduction of total US soya oil consumption, thus facilitating very large exports without reducing stocks (13)

Sun oil: World exports of sun oil were higher than expected at 1.17 Mn T in Oct/Dec 2010 and thus only 4% below the year earlier, despite sizably reduced sunflowerseed production in several northern-hemisphere countries.We have raised this season's sunflowerseed production estimate for Ukraine to a record 7.65 Mn T. Ukraine became the by far largest sun oil exporter at 2.70 Mn T in calendar year 2010. (14)

La Nina: The influence of La Nina on weather conditions in South America and Southeast Asia is still strong. The current event is mainly blamed for the drought in South America and torrential rainfall in parts of Australia, Malaysia and Indonesia.(14)

Biofuel: In **Brazil** biodiesel production stabilized and increased to 171 Thd T in November. It absorbed 1.58 Mn T of soya oil in Jan/Nov 2010, or about one third of domestic soya oil usage in that period.

Malaysian biodiesel exports declined steeply last year to only 3.5 Thd T in Oct/Dec, bringing the total for Jan/Dec 2010 to 89.6 Thd T.(14)

Germany: October balance of 11 major oils, 10 oilmeals, fuel use and imports & exports (SU 15-1)

UK: October balance of 12 major oils, 10 oilmeals and imports & exports (SU 18-1)

European Union: Rapeseed crushings were smaller than expected, declining by an estimated 0.3 Mn T from a year earlier in Oct/Nov. Cumulative crushings virtually stagnated at 9.4 Mn T in July/Nov 2010. With stocks down sharply, rationing will be required during the remainder of this season. Soybean crushings increased year-on-year 18%, making larger imports of soybeans necessary.(15)

USA: Soybean export inspections recovered to 38.3 Mn bu in the week to Jan 6, about in line with expectations and above the preceding week's revised 26.7 Mn bu.Net export sales of US soybeans amounted to 0.7 Mn T in the week ended Jan 6. Net export sales of soya meal were small at only 26 Thd T in the latest week and sharply below expectations.Weekly exports of soya oil and meal increased sharply to 57 and 279 Thd T, respectively.(15 and SU 21-1)

Argentina: November 2010 exports of soybeans and products, exports of sunseed and products(SU 22-2)

Brazil: Initial soybean harvesting started in Mato Grosso, but is running behind last year. Weather generally favourable in Brazil, but in several areas of Rio Grande do Sul it was very dry in the first 11 days of Jan, stressing soybeans (16 and SU 22-1)

Peru: Fish oil and meal production prospects have further deteriorated. (16)

India: Soya meal exports were surprisingly large at an estimated 650 Thd T in Dec. Cumulative shipments rocketed by 64% to 1.57 Mn T in Oct/Dec 2010. Larger demand for Indian soya meal was noted primarily in Japan. Rising exports and relatively large domestic consumption have tightened soya meal export supplies for the months to come. (16)

Indonesia: A recovery in production of palm oil and palmkernels in the second half of 2010 has been confirmed by latest export data. Exports of crude and further processed palm oils were higher than we had expected and reached 1.78 Mn T in Oct. They increased by 0.6 Mn T from a year earlier. Exports of palmkernel oil and meal increased sharply from a year earlier in Oct to 187 and 266 Thd T respectively.(17 and SU 26-2)

Malaysia: Crude palm oil production plummeted to only 1.23 Mn T in Dec, down 16% from a month and 19% from a year earlier. Total palmoil stocks declined to only 1.61 Mn T as of end-Dec 2010. Palm oil imports boosted to a record 1.1 Mn T in Jan/Dec 2010 mainly from Indonesia.(17 and SU 26-1)

Turkey: Imports of oilseeds and oilmeals continued to increase significantly from a year earlier in Oct and Nov 2010 bringing arrivals to new records. Oilseed crushings increased steeply by at least 0.7 Mn T in Jan/Dec 2010, mainly of soybeans (due to higher imports) and sunflowerseed (higher domestic production and imports).(18)

Australia: A first new-crop canola cargo of 55 Thd T was shipped to the EU in Nov. Increasing domestic crushings of canola resulted in sharp rises in canola oil and meal exports in 2010, primarily to Asian destinations.(19)

PRICES continued from page 11:

Prices of crude mineral oil rallied by 4-5% this week whereas those of rapeseed oil appreciated only marginally. This should have somewhat improved the competitiveness of biodiesel produced from rapeseed oil. In recent weeks the premium of rape methyl ester over fossil diesel widened to a level at which mineral oil companies in Europe were at least considering not to fulfil their biodiesel admixture obligations and instead pay the penalty. This could become an important factor creating upward resistance for prices of rape oil and rapeseed as it can remove a significant share of rape oil demand.

Weather conditions in Argentina will be of utmost importance for price-making in the next 2-3 weeks, when soybeans will be in the pod-filling stage. This week it was again predominantly dry in some key Argentine growing areas. There is a better chance for rainfall next week, which may, however, be too light and scattered to break the drought.

PRICES

Lower US Crop Estimates Restoring the Bullish Momentum

USDA further cut US crop sizes of corn by 2.4 Mn T and of soybeans by 1.2 Mn T. Price strength justified by intensifying competition for acreage and necessary demand rationing. Palm oil prices show first but possibly premature reaction to anticipated production recovery.

Important new parameters were established this week by the massive and unexpectedly strong reduction of the 2010 US corn and soybean crop numbers. The US corn crop estimate was lowered by as much as 18 Mn T within the last four months and stocks in the US will probably fall to critically low levels, not seen for 15 years, in the further course of this season. As a result, corn futures prices on the CBOT rallied by 8% in the four trading days to Jan 13, closing at a near 30-month high of US-$ 6.42½ per bushel in the first position.

The severe downward revisions of the 2010 US soybean and corn crops came on top of the anticipated crop losses in Argentina and this has, without doubt, raised the upward potential for prices in the near to medium term, particularly if the weather in key Argentine areas does not improve.

Corn clearly took the lead and soybean futures lagged behind with an increase of 3.7% in the four days to Jan 13. The soybean/corn price ratio dropped to 2.20 on Jan 13, illustrating the difficult task of defending soybean acreage against a red-hot corn market when spring plantings start in the US.

USDA's Jan 12 report clearly reveals the increasing difficulties in satisfying world demand. The US soybean market is now in the third year of extreme supply tightness despite the uninterrupted expansion of plantings to a record level in 2010.

Farmers in the southern hemisphere can no longer respond to the changed fundamentals and the prospects for higher prices and may not even be able to fulfil planting intentions in Argentina owing to the ongoing dryness. The critical situation of corn supplies is already well known, but now also global soybean supplies may become uncomfortably tight, depending on the extent of crop losses in South America.

The revised USDA estimate of the 2011 Argentine soybean crop of 50.5 Mn T may still be too optimistic, given prevailing drought conditions in key growing areas.

Farmers in the US and elsewhere in the northern hemisphere will need to maximize total plantings this spring, possibly enabling an expansion of the corn and soybean areas. This will require corresponding price incentives to bring also marginal land back into production.

This week prices of vegetable oils were clearly weaker than those of oilmeals. Palm oil is mainly responsible for this development. On Jan 13 it could not but follow the uptrend determined by the bullish USDA report, whereas in preceding days palm oil prices had been under significant pressure. However, the market may be early in discounting the anticipated recovery of production, which may not begin before mid-2011.

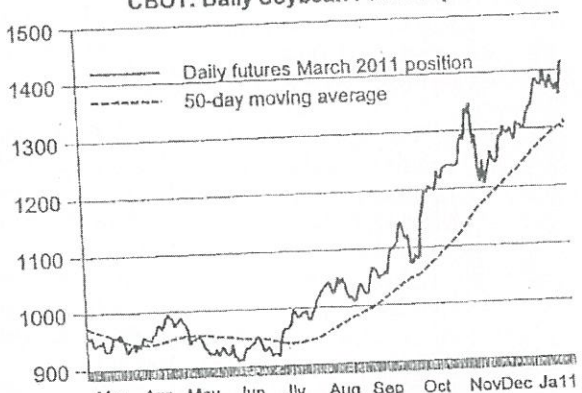
CBOT: Daily Corn Futures (c/bu)

March 2011 position



Daily futures from 1 Apr 2010 until 13 Jan 2011

CBOT: Daily Soybean Futures (in c/bu)



Daily futures from 1 March 2010 until 13 Jan 2011

We are still in the low production period and palm oil stocks in Malaysia as of Jan 1 were at 1.61 Mn T at a four-year low and down 28% from a year ago. The high prices have started rationing demand, but in December consumption exceeded Malaysian palm oil output again. This is likely to continue this quarter.

The lower than expected US soybean supplies and the ongoing threat to this year's Argentine soybean crop from insufficient rainfall have a stronger bearing on prices of soya meal than of oil owing to the high meal content. But vegetable oils cannot escape the bullishness emanating from the aggravating shortage of soybeans, particularly as long as competing oilseeds and palm oil are relatively scarce.

Developments in India may somewhat diminish the bullishness in vegetable oils. Crushings of soybeans and rapeseed turned out surprisingly large in recent months and the outlook for a bumper Indian rapeseed crop could significantly curb the country's vegetable oil import requirements in coming months.

...to be continued on page 10

FORECAST

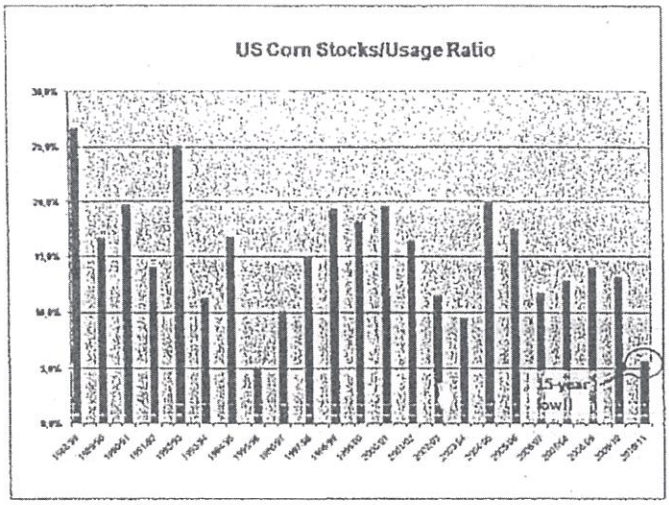
US Crop Sizes Revised Downward

2010 corn crop lowered by 2.4 Mn T and soybeans by 1.2 Mn T. US soybean and corn stocks are likely to fall to critically low levels by the end of this season.

The USDA reported some major downward revisions of the 2010 US crop sizes in its monthly report of Jan 12. The **soybean** crop estimate was lowered by as much as 1.2 Mn T to only 90.6 Mn T, which compares to 94.8 Mn T expected in early September. The yield estimate was cut to 2.92 T/ha, still the second highest on record but down 1.4% from the year before. A record crop size had initially been expected for 2010, but it turned out 0.8 Mn T lower than the year before.

The sunseed crop estimate was reduced sharply by 6% to 1.24 Mn T, a 3-year low and 0.14 Mn T less than the year before. This will enforce rationing of sunseed demand in the further course of the season, considering that crushings rose by 2.5% to a multi-year high of 285 Thd T in Sept/Dec 2010.

The crop sizes of cottonseed and rapeseed were lowered slightly but are still up steeply from the year before at 5.6 and 1.1 Mn T, respectively.



U.S.A. : Output of 7 Grains & 6 Oilseeds

(Mn T)	USDA Jan12 2010	USDA Dec10 2010	2009	2008	2007
All wheat	60.10	60.10	60.37	68.02	56.25
Corn	316.17	318.52	333.01	307.39	332.09
Sorghum	8.77	8.58	9.73	12.00	12.83
Barley	3.93	3.93	4.95	5.23	4.61
Oats	1.18	1.18	1.35	1.29	1.33
Rye	.19	.19	.18	.20	.20
Rice	11.03	10.96	9.97	9.24	8.96
7 Grains	401.37	403.46	419.50	403.37	416.27
Soybeans ...	90.61	91.85	91.42	80.75	72.86
Cottonseed ..	5.62	5.65	3.76	3.90	5.98
Gr'dnuts(a) ..	1.41	1.35	1.26	1.76	1.25
Sunfl.seed ...	1.24	1.32	1.38	1.55	1.31
Canola (b) ...	1.11	1.15	.67	.66	.66
Flaxseed	.23	.20*	.19	.15	.15
6 Oilseeds ..	100.22	101.52	98.68	88.76	82.21
Grand Total	501.59	504.98	518.18	492.13	498.48

(a) 75% of unshelled. (b) Incl. rapeseed.

In contrast, the groundnut crop estimate was raised significantly by 5% to 1.41 Mn T (shelled), up from 1.26 Mn T in 2009. The larger acreage more than offset a setback of average yields.

The first official estimate of US flaxseed production was at 230 Thd T surprisingly large and up 22%.

Combined **production of 6 oilseeds** reached 100.2 Mn T in 2010, up 1.5 Mn T from a year and 15.4 Mn T from 10 years earlier.

The US **corn** crop estimate turned out below expectations at 316.2 Mn T, a downward revision by 2.4 Mn T from Dec 12 and by as much as 18.1 Mn T from Sept 10. Corn stocks as of Dec 1 were reported at a historical low of 10.04 Bn bu, against 10.91 Bn bu a year earlier. The USDA expects US corn stocks at the end of this season at only 745 Mn bu, down from 1.71 Bn bu a year ago and a 15-year low. This implies a stocks/usage ratio of only 5.6%, illustrating a severe supply shortage when compared to a ratio of 14.5% on average of the preceding 10 seasons.

US soybean stocks were reported at only 61.97 Mn T as of Dec 1, in line with the lower crop estimate and down 1.7 Mn T on the year.

The lower than expected soybean supplies will require some demand rationing in the further course of the season. Crushings may be curbed to 45.8 Mn T in 2010/11, down 1.9 Mn T. The rationing of export demand will be more difficult, given the large export sales so far. We peg US soybean exports at 43.3 Mn T In Sept/Aug 2010/11, up 2.4 Mn T. This increase was already registered in the first three months of this season.

Under these assumptions US soybean stocks may be reduced severely to only 3.4 Mn T by end-Aug 2011. This season is thus likely to be the third one in a row ending with minimum stocks of less than 5% of usage.

U.S.A. : Soybean Supply & Demand (Mn T)

	September / August 10/11F	09/10	08/09	07/08	Sept/Nov 2010	2009
Op. stocks ..	4.11	3.76	5.58	15.62	4.11	3.76
Crop	90.61	91.42	80.75	72.86	90.61	91.42
Imports	.60*	.43	.38	.29	.10*	.09
Crushings ...	45.80*	47.67	45.23	49.08	12.04	12.11
Exports	43.30*	40.88	34.84	31.57	16.88	14.60
Other use ...	2.82*	2.95	2.88	2.54	3.92*	4.91
End. stocks ..	3.40*	4.11	3.76	5.58	61.97	63.64
Stocks/usage	*3.7%*	*4.5%*	*4.6%*	*6.7%*		

SOYA OIL

World soya oil exports increased to a 3-year high of 2.6 Mn T in Oct/Dec 2010 and were **up steeply by 40%** from a year earlier, benefiting from reduced world supplies and exports of palm oil. Also, soya oil improved its competitiveness vis-a-vis palm oil in recent weeks, when palm oil was the price leader upward as a result of the considerably lower than expected South-east Asian production and stocks.

In our revised estimate we place world exports of soya oil at 738 Thd T in December compared with 935 Thd T a month and 638 Thd T a year earlier. World exports jumped by 0.74 Mn T from a year earlier in Oct/Dec and by 0.55 Mn in July/Sept 2010, in contrast to a year-on-year decline of 0.52 Mn T in Jan/June 2010. As summarized in the table, the biggest increase in the Oct/Dec quarter occurred in Argentina, while exports from Brazil and the USA were up more moderately.

SOYA OIL : World Exports (1000 T)

	Oct / Dec			January / December			
	2010	2009	2008	2010	2009	2008	2007
EU-27(a) ...	85*	74	61	397*	404	308	253
U.S.A.	536*	437	163	1622*	1269	1157	923
Argentina ..	1287*	803	1075	4981*	4560	5069	6471
Bolivia	41*	40	26	217*	197	150	199
Brazil	314	199	515	1564	1594	2316	2343
Paraguay ..	63*	51	39	230*	255	213	206
Oth ctrs	256*	240	261	1009*	975	880	798
Total	2581	1844	2139	10020	9254	10093	11192

(a) Excluding intra-trade.

China did not purchase South American soya oil in the past few weeks. Brazil is practically sold out for nearest shipment. We are not aware of any particular reason why China has not purchased Argentine soya oil since end-November and instead turned to US origin at a premium. We assume there are political reasons behind this. Chinese soya oil imports are currently still made by government companies and according to government instructions. On January 12 the USDA confirmed 40 Thd T of US soya oil sold to China, which brought total US commitments for export to China to almost 290 Thd T so far this season (against nil a year ago).

G - 3 : Soya Oil Exports to China,P.R. & Hong Kong

(1000 T)	Argentina		Brazil		U.S.A.	
	2010	2009	2010	2009	2010	2009
Jan	78	183	-	2	2	.
Feb	15	198	36	30	3	.
March ..	24	158	-	49	.	.
April ...	31	197	9	42	.	51
May	1	258	44	28	.	.
June ...	-	175	214	72	.	.
July	.	199	263	96	42	.
Aug	7	133	154	108	83	3
Sept ...	1	226	109	31	35	.
Oct	38	102	53	63	90	.
Nov	59	112	67	24	60	5
Dec	20*	46	-	4	85*	5
Jan/Dec	274*	1987	949	549	400*	65

Argentine soya oil exports to China were resumed in October with 38 Thd T shipped, followed by 59 Thd T in November, according to INDEC statistics. For December we estimate exports at 20 Thd T, but there are conflicting reports (one of our sources indicates that there were no exports in December).

The USA exported approximately 85 Thd T of soya oil to China in December, bringing the total for the calendar year to 400 Thd T.

Argentina & Brazil: A closer analysis of the soya oil exports reveals some interesting developments. India emerged as the largest export destination in December, whereas Iran was in the first place in the Oct/Dec 2010 quarter. South American soya oil exports to China & Hong Kong plummeted in December.

Exports to the European Union from Argentina and Brazil increased by 52% to 141 Thd T in Oct/Dec 2010, according to preliminary data, due to rising demand and insufficient supplies of rape oil in the EU.

Also Africa became a more important export destination for South American soya oil, partly replace reduced arrivals of US soya oil.

In Central & South America the key export destinations in Oct/Dec 2010 were Venezuela, Peru, Colombia, Chile, the Dominican Republic, Cuba and Guatemala, all of them receiving significantly higher quantities than a year earlier.

G-3 : Exports of Soybean Oil (1000 T)

	Oct/Dec		Jan / Dec		
From:	2010	2009	2010	2009	2008
U.S.A.	536*	437	1622*	1269	1157
Argentina ...	1287*	803	4981*	4560	5069
Brazil	314	199	1564	1594	2316
Total	**2137***	**1439**	**8167***	**7423**	**8542**
Of which to:					
EU-27	141*	93	433*	328	1014
Africa	368*	212	1234*	996	1651
Algeria	*111**	*38*	*286**	*190*	*219*
Egypt	*99**	*11*	*312**	*230*	*450*
Morocco ...	*66**	*87*	*285**	*232*	*324*
Tunisia	*29**	*21*	*98**	*63*	*227*
Oth. Africa .	*63**	*55*	*253**	*281*	*431*
America	446*	270	1666*	1328	1685
Cuba	*28**	*13*	*103**	*66*	*77*
Dom. Rep ..	*61**	*28*	*153**	*131*	*108*
Mexico	*42**	*55*	*199**	*178*	*249*
Chile	*43**	*19*	*150**	*85*	*144*
Colombia ..	*44**	*16*	*113**	*92*	*171*
Peru	*70**	*48*	*341**	*252*	*266*
Venezuela .	*69**	*28*	*250**	*216*	*236*
Oth.America	*89**	*63*	*357**	*308*	*434*
Asia	1174*	861	4810*	4751	4130
Bangladesh	*77**	*142*	*256**	*387*	*181*
China&H.K.	*470**	*361*	*1622**	*2601*	*2281*
India	*182**	*194*	*1650**	*975*	*799*
Iran	*266**	*14*	*559**	*140*	*391*
S. Korea ...	*59**	*48*	*248**	*227*	*150*
Pakistan ...	*9**	-	*36**	*43*	*5*
Other Asia .	*111**	*102*	*439**	*378*	*323*
Other c'trs.	8*	3	24*	20	62

For January 2011 preliminary information reveals that Argentina will probably export 280-320 Thd T of soya oil to all destinations compared with 203 Thd T a year ago. According to preliminary shipment statistics India, Iran and North Africa will again be major destinations. We expect Argentine soya oil exports to India to reach at least 60-70 Thd T this month, while Iran will receive at least 40 Thd T. So far we have not seen any quantities of soya oil to China in the Argentine vessel lineups for January.

The USA increased soya oil exports to a record 0.54 Mn T in Oct/Dec 2010, approximately 100 Thd T above the preceding year's level. Exports to China were boosted to around 225 Thd T (against nil last year) but were reduced to several other destinations, primarily to some other Asian destinations and to North Africa.

The sharp decline in domestic biodiesel production resulted in a sizable reduction of total US soya oil consumption, thus facilitating very large exports without reducing stocks. But with US biodiesel production set to recover this year, there will be an increasing competition between domestic and foreign demand for US soya oil in the months ahead. This will occur in a period of declining soybean crushings and result in a significant decline in US soya oil stocks.

G-3 exports of soya oil: The three major exporting countries Argentina, the USA and Brazil boosted soya oil exports to 2.14 Mn T in Oct/Dec 2010. This is up 0.7 Mn T from a year earlier, primarily due to increased shipments to China, Iran and some other Asian countries as well as to North Africa and Latin America. Also the European Union sharply increased soya oil imports.

SUNFLOWER OIL

World exports of sun oil were higher than expected at 1.17 Mn T in Oct/Dec 2010 and thus only 4% below the year earlier, despite sizably reduced sunflowerseed production in several northern-hemisphere countries. This is true primarily for Russia where severe drought cut production to an estimated 5.7 Mn T (against 6.6 a year earlier), despite larger plantings.

But sunflowerseed crushings were kept at a high level and in some countries they even increased, resulting in a reduction of sunflowerseed stocks as of end-December 2010.

We have raised this season's sunflowerseed production estimate for Ukraine by 0.15 Mn T to a record 7.65 Mn T compared with the previous high of 7.3 Mn T achieved last year. But also in Ukraine total sunseed stocks as of end-Dec 2010 were down from a year earlier, due to the record crushings in Sept/Dec.

Sun oil exports from Ukraine reached a record 0.80 Mn T in Oct/Dec 2010 and were thus about 150 Thd T or 23% above the previous year's level. Significant increases were noted in shipments to India to a record 93 Thd T in Dec and to even 210 Thd T in Oct/Dec 2010 (against only 58 Thd T in Oct/Dec 2008). Sizably higher shipments were also recorded to Turkey, Iran, Egypt, Russia and the European Union.

Ukraine became the by far largest sun oil exporter at 2.70 Mn T in calendar year 2010 (virtually double the quantity registered two years earlier), thus accounting for a record 57% of world exports.

On the other hand, Russian sun oil exports were curtailed by declining production and rising domestic demand and fell by almost two thirds in Oct/Dec 2010.

SUNFLOWER OIL : World Exports (1000 T)

	Oct / Dec			January / December			
	2010	2009	2008	2010	2009	2008	2007
EU-27(a) . . .	34*	44	36	134*	140	117	133
Oth. Europe	25*	37	28	90*	103	64	74
Russia	59*	145	254	420*	724	490	614
Ukraine	795	644	506	2703	2335	1347	1925
U.S.A.	15*	21	22	95*	95	82	80
Argentina . .	98*	175	201	650*	1055	1268	943
Bolivia	14*	25	16	92*	111	78	61
Turkey	40*	28	118	138*	242	244	94
Oth ctrs	89*	97	96	397*	392	379	372
Total	1170	1215	1279	4718	5198	4070	4295

(a) Excluding intra-trade.

Exports from Argentina more than halved to only around 100 Thd T in Oct/Dec 2010. Reductions were also noted in several other countries, with details given in the table.

FACTS & FIGURES

La Niña

The influence of La Niña on weather conditions in South America and Southeast Asia is still strong. The Southern Oscillation Index probably peaked at +27 in December but was still high at +24 in the 30 days until Jan 9, according to the Australian Bureau of Meteorology. SOI values of above +8 indicate a La Niña event.

The current La Niña is the strongest since at least 1973 and is mainly blamed for the drought in South America and torrential rainfall in parts of Australia, Malaysia and Indonesia. It is currently expected to last well into the second quarter of 2011.

BIOFUEL

Brazil: Biodiesel production stabilized and increased to 171 Thd T in November, following a decline in the preceding two months. Production was thus about in line with the monthly average of 174 Thd T registered in Jan/Nov 2010, up steeply from an average 117 Thd T the year before.

Brazilian biodiesel production absorbed 1.58 Mn T of soya oil in Jan/Nov 2010, accounting for about one third of domestic soya oil usage in that period (against 25% a year before). Brazilian biodiesel producers increasingly depended on soya oil as feedstock in recent months, with the share of it reaching 83% in November, up from 77% a year earlier.

BRAZIL : Biodiesel Production (1000 T)

	Nov		Jan /Nov		Jan / Dec	
Biodiesel	2010	2009	2010	2009	2009	2008
Production . .	171	146	1911	1283	1415	1030
Feedstock used						
Soya oil	142	113	1578	1003	1097	830*
Tallow	22	23	256	202	234	160*
Cotton oil . . .	5	6	45	48	47	24*
Other oils . . .	2	4	32	30	37	16

Malaysia: Biodiesel production and exports declined steeply last year. Exports plummeted to only 3.5 Thd T in Oct/Dec, bringing the total for calendar year 2010 to 89.6 Thd T vis-a-vis 227.5 Thd T in Jan/Dec 2009.

EUROPEAN UNION

Rapeseed crushings were smaller than expected, declining by an estimated 0.1 Mn T from a year earlier in October and an estimated 0.2 Mn T in November in contrast to year-on-year increases in July/Sept 2010. Reduced processing occurred in Germany and Belgium. Cumulative rapeseed crushings virtually stagnated at 9.4 Mn T in July/Nov 2010. But with stocks down sharply, rationing will be required during the remainder of this season.

EU processing of sunflowerseed developed virtually in line with our expectations in Oct and Nov 2010, bringing the cumulation for July/Nov to 2.4 Mn T, down 0.1 Mn T from a year earlier.

EU - 27 : Crushings of 3 Oilseeds (Mn T)

	Nov 2010	Oct 2010	Nov 2009	July/Nov 2010	July/Nov 2009
Soybeans	1.11*	1.05	.94	5.27*	4.93
Sunseed	.67*	.66	.63	2.40*	2.49
Rapeseed	1.90*	1.99	2.09	9.43*	9.42
Total	**3.68***	**3.70**	**3.66**	**17.09***	**16.84**

Soybean demand recovered in the European Union with processing showing sizable year-on-year increases of 18% in both Oct and Nov 2010. This necessitated larger imports of soybeans. In July/Nov 2010 crushings approached 5.3 Mn T and were thus 0.3 Mn T or 7% higher than a year earlier.

U.S.A.

Soybean export inspections recovered to 38.3 Mn bu in the week to Jan 6, about in line with expectations and above the preceding week's revised 26.7 Mn bu (20.2 Mn previously reported). Exports were again down from a year earlier, slowing the year-on-year increase in cumulative export inspections since Sept 1 to 5%.

For the month of December 2010 export inspections were reported at 190 Mn bu or 5.2 Mn T, down 16% from a year earlier.

U.S.A. : Soybean Export Inspections (Mn bu)

	Week ending Jan06 2011	Jan07 2010	Dec30 2010	Dec31 2009	Since Sept 1 2010	Since Sept 1 2009
Total	38.3	47.1	26.7r	38.8	842.0	798.9
W.Europe	7.7	4.8	2.6	2.8	50.1	51.0
Canada(a)	-	-	-	-	18.1	22.1
Mexico ..	-	1.8	0.8	0.9	48.4	39.8
China ...	20.9	30.0	18.2r	21.4	569.4	513.2
Indonesia	1.5	0.6	0.2r	3.1	23.6	22.0
Japan ...	0.7	1.1	1.0	2.7	28.3	32.5
S.Korea	1.8	-	-	-	13.0	10.7
Taiwan ..	2.6	4.8	0.4r	0.2	28.6	26.9
Oth.Asia	2.4	2.2	1.4r	5.3	34.1	50.9
Oth.ctries	0.7	1.8	2.0	2.4	28.5	29.8

(a)Mainly transshipments via Canadian ports ,mostly to Europe.

Net export sales of US soybeans amounted to 0.7 Mn T in the week ended Jan 6, of which 0.2 Mn T for new-crop shipment from Sept 2011 onward. Total US soybean export commitments thus reached a record 35.9 Mn T for Sept/Aug 2010/11 (against 33.0 Mn T at the same time last year). Undelivered sales were still 13.7 Mn T as of Jan 6 or 117% of the year-ago level. China was again the key buyer of US soybeans, taking 217 Thd T for this season and 120 Thd T for next season. Net export sales of soya meal were small at only 26 Thd T in the latest week and sharply below expectations. Cumulative commitments so far were 4.8 Mn T (vs. 6.2 a year ago), of which undelivered 2.5 Mn T or 79% of a year ago.

Soya oil export sales reached 7.5 Thd T in the week ended Jan 6, bringing total commitments to 0.97 Mn T so far this season (vs. 0.84), of which undelivered 0.42 or 107%. In the week to Jan 13 China purchased at least 40 Thd T of US soya oil, which is likely to be included in next week's report.

Weekly exports of soya oil and meal increased sharply to 57 and 279 Thd T, respectively. 39 Thd T of US soya oil was exported to China & Hong Kong and 9 Thd T to Morocco.

U.S.A.: Exports of Soya Oil & Meal (1000 T)

	Week ending Dec30 2010	Dec23 2010	Dec31 2009	Since October 1 10/11	Since October 1 09/10
Soya oil (a)	5.9	41.5	9.6	488.2	405.8
Soya meal (a)	134.2	147.1	263.9	2068.2	2777.7

(a) Incomplete.

Live cattle and beef prices increased further so far this week on ideas that additional rainfall and continued flooding in Australia would boost US exports of beef. On the Chicago Mercantile Exchange live cattle futures jumped to new record highs on Jan 11. Also, feeder cattle prices increased to US$ 1.23 for January and $ 1.25 per pound for March. The cattle industry in Australia has been hit by the extensive flooding in Queensland and parts of New South Wales, also affecting exports. As a result, buyers in Asia have shifted their demand to US origin as well as to other beef exporting countries.

ARGENTINA

A return to hot and dry conditions has affected corn, soybeans and other summer crops this week. Very little rainfall was received in the week ended Jan 13, particularly in Santa Fe, Cordoba and the northern Buenos Aires province. Some rains are forecast to arrive, primarily in Entre Rios but also in other areas. It is questionable whether this will noticeably improve the situation because of the prevailing warmer than usual conditions. Weather statistics for Jan 1-13 point to above-average rainfall in La Pampa and several central and southern regions in the Buenos Aires province.

It is estimated that approx. 3 Mn ha of the Argentine soybean fields is in critical condition; some of that may need to be replanted. As of Jan 13, 1.5 Mn ha of the intended soybean area was not yet planted, most of which in the northern parts of the country. It is questionable whether planting intentions can be carried out. Although some beneficial rainfall is expected in the next 15 days, it is unlikely to break the drought. The required

widespread rainfall of 100-120 mm is considered unlikely to be obtained, according to current weather forecasts. Soybeans will move into the critical phase of development within the next few weeks.

Unless conditions improve soon, it is getting more and more likely that this year's Argentine soybean crop plunges to or below 46 Mn T.

Production prospects for corn deteriorated significantly during the past three weeks as a result of the dryness and above-normal temperatures, occurring at the time of pollination. In many areas the crop damage is irreversible. We now consider it likely that this year's Argentine corn crop plunges to only around 19 Mn T compared with initial expectations of around 25 Mn T and last year's 22.7 Mn.

A one-week strike will be launched by Argentine farmers on January 17. This is in protest to government policies, primarily the frequent government intervention interfering with marketing and exporting of agricultural crops and livestock products as well as to the still very high export taxes on agricultural commodities, especially soybeans and their products. This strike will reportedly be supported by parts of the industry and trade. Farm unions have stated that farmers will stop commercializing during the strike period.

BRAZIL

Initial harvesting of early soybean varieties started in Mato Grosso, but it is running behind last year's pace. Weather conditions are generally favourable in Brazil, but there was partly too much and partly insufficient precipitation. In parts of Mato Grosso considerably above-normal rainfall was received in recent weeks. The Asian rust fungus has reportedly become a problem in several areas, but is not as widespread as last year.

In several areas of Rio Grande do Sul it was very dry in the first 11 days of January, stressing soybeans in the current important phase of development.

PERU

Fish oil and meal production prospects have further deteriorated, reportedly making it difficult for producers to satisfy export commitments, particularly of fish meal. There is considerable concern about the resources, initiating additional catch restrictions. Even if the government extends the fishing period until the first week of February the actual catch will remain sharply behind the quota of 2.07 Mn T announced in Nov 2010.

During the four days of general fishing (Jan 6-9), the total catch reached only 160 Thd T of raw fish, translating into about 37 Thd T of fish meal and 5 Thd T of fish oil. The daily landings were as follows: 9.5 Thd T on Jan 6, 35.2 Thd on Jan 7, 65.1 Thd on Jan 8 and 50.1 Thd T on Jan 9. However, the large share of juveniles continued to be a major problem. As a result, the Ministry enforced partial fishing bans for 10 days (Jan 10-19) for the first 30 miles off the shore in Chicama and the centre region up to Callao as well as for the first 60 miles in the region south of Callao up to Pisco. But in other areas general fishing is still allowed.

As a result, Peruvian fish meal production and export supplies will turn out even smaller than expected in Jan/Febr 2011. Owing to the current uncertainty, Peruvian fish oil and meal producers and exporters were completely inactive and trading came to a standstill during the week in review.

Peruvian exports of fish oil and meal again declined sharply from a year before in December, resulting in significant cutbacks for the full calendar year 2010, as shown in the table.

PERU : Fish Meal & Oil Exports (1000 T)

	Dec 2010	Nov 2010	Dec 2009	Jan/Dec 2010	Jan/Dec 2009
Fish meal	**39.2**	**12.8**	**140.2**	**1072.6**	**1538.3**
EU-27	3.6	3.2	36.0	214.6	395.0
Chile	4.5	1.8	-	39.9	5.1
China, PR	16.8	1.5	77.3	544.6	754.8
Japan	3.2	1.1	13.0	111.6	117.1
Taiwan	1.4	1.3	5.7	33.6	62.4
Turkey	2.6	0.4	-	19.3	42.2
Vietnam	1.4	-	1.0	37.4	62.9
Fish oil	**9.1**	**15.6**	**15.3**	**237.6**	**291.1**
EU & Norway	0.2	8.7	9.4	110.1	34.8
Chile	3.0	4.7	-	62.0	22.2

INDIA

Soya meal exports were surprisingly large at an estimated 650 Thd T in December, a 2-year high and up steeply from 368 Thd T a year before, benefiting from lower than expected exports from Argentina. Cumulative Indian shipments rocketed by 64% to 1.57 Mn T in Oct/Dec 2010. Stronger demand for Indian soya meal was noted primarily in Japan, Indonesia and the EU-27. Indian soya meal exporters recently covered the bulk of Japanese import requirements, mainly at the expense of Chinese exporters.

Rising exports and relatively large domestic consumption have tightened soya meal export supplies for the months to come. Indian exporters have reportedly become reserved sellers for the deferred months and are focussing on soya meal sales for the spot market.

Also exports of rapeseed meal were outstanding at 110 Thd T in December, more than double the year before. China, South Korea and Turkey were the key destinations.

INDIA: Exports of 3 Oilmeals (1000 T)

	Dec 2010	Nov 2010	Dec 2009	Oct/Dec 2010	Oct/Dec 2009
Soya meal ...	**650**	**491**	**368**	**1566**	**956**
EU-27	75	54	12	129	38
China, P.R. .	21	20	21	65	29
Indonesia ..	91	48	29	160	62
Japan	179	143	57	461	193
Philippines .	6	12	-	30	8
Thailand ...	37	34	54	86	104
Turkey	18	-	1	40	8
Vietnam ...	134	63	88	295	274
Rape meal ...	**110**	**42**	**51**	**233**	**130**
China, P.R. .	44	20	20	65	28
Korea, South	37	5	9	106	61
Turkey	13	-	-	13	-
G'nut meal(a)	**-**	**-**	**6**	**1**	**6**
3 Oilmeals	**760**	**532**	**425**	**1800**	**1091**

(a) Virtually all to China.

Indian imports of the major vegetable oils (edible and inedible) declined by 13% on the year in November and by 4% in December according to data provided by the Solvent Extractors' Association. Still, in Oct/Dec 2010 they were at 2.24 Mn T up marginally owing to huge arrivals in October.

In Oct/Dec 2010 imports of palm oil increased by 2% to 1.84 Mn T and those of sunflower oil were up 40% at 0.14 Mn T. In contrast, soya oil imports declined by 12% to 0.21 Mn T last quarter. The slowdown of soya oil import demand may partly result from the sharp increase in Indian soybean crushings, as indicated by the impressive growth of soya meal exports.

INDIA : Imports of 7 Major Oils (1000 T)

	Dec		Nov		Oct / Dec		
	2010	2009	2010	2009	2010	2009	2008
Soya oil	49	100	32	78	206	235	187
Cotton oil	-	-	-	-	-	-	-
Sun oil	42	27	63	56	141	101	51
Rape oil	-	6	-	-	-	10	-
Palm oil	648	635	551	592	1841	1799	1846
Palmkern oil	13	16	13	27	55	60	38
Coconut oil	1	3	-	1	1	5	6
Total	**753**	**787**	**659**	**754**	**2244**	**2209**	**2128**

Stocks of palm oil at Indian ports increased to 550 Thd T at the end of December (vs. 410 Thd T a month earlier) while those of soya oil declined further to only 50 Thd T (100) and of sunflower oil to 40 Thd T (50).

Rapeseed plantings increased further to 7.1 Mn ha as of Jan 13, up from 6.4 Mn ha a year and 6.6 Mn ha two years earlier. Rabi plantings of other oilseeds were reported as follows in Mn ha: groundnuts 0.57 (0.68; 0.60), safflower 0.24 (0.27; 0.28), sunflower 0.48 (0.81; 1.06) and linseed 0.42 (0.42; 0.44).

Rapeseed plantings in the key producing state of Rajasthan were expanded from 2.3 Mn to 3.2 Mn ha, setting the stage for a record crop if weather cooperates.

On the Indian wholesale market prices of some major vegetable oils appreciated significantly in recent weeks, driven by the uptrend on the world market. During Dec 2-Jan 7 prices of cotton oil increased by 6%, of soya oil by 8%, rape oil by 5% and RBD palm olein by 8%. Groundnut oil and sunflower oil moved sideways in that period. A moderate decline occurred in the week to Jan 13.

Domestic prices of castor oil continued to rally to 950 Rs/10 kilos on Jan 13, up 13% since Dec 2. Export prices increased to as much as US-$/T 2075 fob Kandla on account of delayed new-crop arrivals and uncertainty about castorseed crop losses.

INDIA : Domestic Prices in Mumbai (Rs/10 kilos)

	Jan13	*Jan7*	*Dec30*	*Dec23*	*Dec 2*	*Nov 4*	*Jan*
	2011	2011	2010	2010	2010	2010	*2010*
Groundnut oil	760	780	770	760	775	700	683
Cotton oil	560	570	560	543	536	488	413
Soya oil, refined	615	615	600	575	568	525	453
Sun oil	670	670	665	660	675	635	449
Rape oil (Jaipur)	605	612	602	589	582	550	502
RBD palm olein	582	587	580	567	545	505	392
HSS castor oil	950	890	880	858	840	768	607

INDONESIA

A recovery in production of palm oil and palmkernels in the second half of 2010 has been confirmed by latest export data. Official trade statistics have become available until Oct 2010 and are summarized in the table. Rainfall in December was an average 17% below normal in Sumatra, but above-normal in most of Kalimantan and Sulawesi. Cumulative rainfall in calendar year 2010 was well above normal in virtually all of Indonesia. (See the second table on SU 26-2.)

INDONESIA : Exports of Palm Oil (1000 T)

	Oct	Sept	Oct	Jan / Oct	
Exports to:	2010	2010	2009	2010	2009
EU-27	**232**	**305**	**311**	**2229**	**2351**
Ukraine/Russia	63	83	44	459	204
Egypt	62	38	37	445	357
Ivory Coast	32	-	2	53	17
Kenya	48	47	52	338	409
Rep.S.Africa	24	12	5	147	103
Other Africa	51	43	46	437	348
USA	14	7	17	32	57
Brazil	21	4	13	110	78
Other America	-	5	1	32	13
Bangladesh	129	76	84	728	641
China	**281**	**180**	**159**	**1726**	**2211**
India	**533**	**497**	**407**	**4296**	**4302**
Iran	49	19	4	224	121
Malaysia	126	72	73	1061	827
Myanmar	19	8	3	110	93
Pakistan	11	2	11	61	179
S. Arabia	-	-	16	39	172
Turkey	27	20	2	120	82
Vietnam	22	11	21	148	177
Other Asia	36	12	14	213	165
Other countries	1	1	-	28	13
Total	**1781**	**1442**	**1322**	**13036**	**12920**

Exports of crude and further processed palm oils were higher than we had expected and reached 1.78 Mn T in October. They started to recover in August 2010 and increased by 0.6 Mn T from a year earlier in Aug/Oct 2010 in contrast to a year-on-year decline by 0.5 Mn T in Jan/July. India was again the key export destination in October, followed by China, the EU-27, Bangladesh, Malaysia and the African continent. It is interesting to note that Indonesia exported 32 Thd T of palm oil to Ivory Coast in October and 53 Thd T in Jan/Oct 2010, which is probably an indication that palm oil production in Ivory Coast turned out below expectations in 2010.

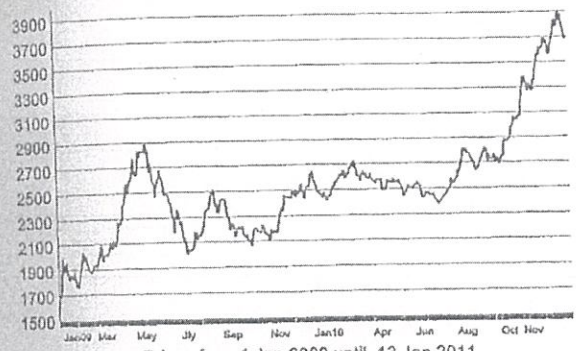
Exports of palmkernel oil and meal increased sharply from a year earlier in October to 187 and 266 Thd T, respectively. On the other hand, exports of coconut oil were again relatively small at 45 Thd T in October and the cumulation was still depressed at 566 Thd T in Jan/Oct 2010. Some recovery, however, occurred in copra meal exports in Sept and Oct 2010. More details are given on SU 26 - 2.

MALAYSIA

Total stocks of crude and processed palm oils declined to only 1.61 Mn T as of end-Dec 2010, down sharply by 0.6 Mn T from a year earlier and

the lowest December level in four years. Palm oil prices already appreciated substantially in December and reached a 34-month high on the Bursa Malaysia Derivatives in early January 2011, also owing to the sizeably reduced Malaysian export supplies in early 2011. Palm oil prices have been relatively firmer than soya oil, partly as a result of the very low Malaysian stocks. Crude palm oil futures on the Bursa Malaysia Derivatives weakened somewhat after having reached a peak of 3907 ringgit on January 4.

MALAYSIA: Crude Palm Oil Futures Close
First position in Malaysian Ringgit/T



Prices from 1 Jan 2009 until 13 Jan 2011

Crude palm oil production plummeted to only 1.23 Mn T in December, according to the MPOB, down 15.5% from a month and 19% from a year earlier. It was the lowest December production in 4 years, resulting from the combined effect of a reduced number of fresh fruit bunches and harvest delays (heavy rainfall). The FFB yield per hectare declined by 21% from a year earlier in December and by 6.1% in calendar year 2010.

Malaysian palm oil production declined in two consecutive years from 17.73 Mn T in Jan/Dec 2008 to 17.57 Mn T in 2009 and only 17.0 Mn T in Jan/Dec 2010. -- But for calendar year 2011 we expect a sizeable recovery in palm oil yields and total production.

MALAYSIA : Balance of Palm Oil (1000 T)

	Dec 2010	Nov 2010	Dec 2009	Jan/Dec 2010	Jan/Dec 2009
Open'g stocks	1636	1793	1935	2239	1995
Production					
West Malaysia	647	806	792	9498	10121
Sabah/Sarawak	585	653	728	7495	7445
Total	1233	1459	1520	16993	17566
Imports	121	91	165	1112	924
Exports	1286	1506	1224	16659	15881
Dom.consumption	89	202	156	2071	2364
Ending stocks	1615	1636	2239	1615	2239
Crude palm oil	709	865	1197	709	1197
Processed	906	771	1042	906	1042

Malaysia boosted palm oil imports to a record 1.1 Mn T in Jan/Dec 2010 (up 0.2 Mn from a year earlier), mainly from Indonesia, most of which crude palm oil for processing in Malaysia destined for the export market. Exports increased by 0.8 Mn T in calendar year 2010 to 16.66 Mn, of which to the European Union 2.06 Mn T (vs. 1.89 in 2009), to Egypt 0.94 (0.61), other African destinations 1.58 Mn T (1.30), China 3.48 (4.03), India 1.17 (1.35), Pakistan 2.14 (1.77) and to other Asian destinations 3.58 (3.25). For details see SU 26-1.

The record-high prices of palmkernel oil are partly a reflection of insufficient supplies in Malaysia. In Rotterdam palmkernel oil was offered at an all-time high of US-$ 2070 per tonne on Jan 6 and was up substantially from US-$ 900 a year ago. But we would like to mention two other factors which contributed to the price rally, viz. lower than expected Indonesian production and very strong world demand.

In Malaysia stocks of palmkernel oil continued to decline in December reaching 243 Thd T at the end of the month, well below the two preceding years and the lowest end-December level in five years. Also, stocks of palmkernels fell to only 93 Thd T at the end of the month, thus representing the lowest end-December level in even 10 years.

Malaysian production of palmkernels turned out smaller than expected at only 303 Thd T in December (down a staggering 23% from a year earlier) and was at 4.29 Mn T in calendar year 2010 down sizably by 4.8%. Malaysian production of crude palm oil dropped by 3.3% in Jan/Dec 2010, which is suggesting smaller kernel sizes and relatively lower palmkernel oil output from the fresh fruit bunches (FFB).

Production of palmkernel oil also declined sizably to only 153 Thd T in December, bringing the total for Oct/Dec 2010 to just 530 Thd T (down 13%). Exports continued to rise, while imports declined. Domestic disappearance of palmkernel oil plummeted by 15% from a year earlier to only 339 Thd T in Oct/Dec 2010, in contrast to a moderate increase (up 5%) in Jan/Sept 2010.

MALAYSIA : Balance of Palmkernel Oil (1000 T)

	Oct/Dec 2010	Oct/Dec 2009	Jan/Dec 2010	Jan/Dec 2009	Jan/Dec 2008
Op'g stocks	246	234	306	349	269
Production	530	612	2015	2097	2131
Imports	123	165	445	384	330
Exports	317	309	1164	1117	1047
Dom.consumption	**339**	**397**	**1359**	**1407**	**1333**
End'g stocks	243	306	243	306	349

TURKEY

Imports of oilseeds & oilmeals continued to increase significantly from a year earlier in Oct and Nov 2010, bringing total arrivals to new record levels in Jan/Nov. Quite obviously, domestic consumption of oilmeals recovered more pronouncedly than that of vegetable oils in calendar year 2010.

Oilseed crushings increased steeply by at least 0.7 Mn T in calendar year 2010, mainly of soybeans (due to higher imports) and sunflowerseed (higher domestic production and imports).

Also rapeseed imports and crushings were apparently higher than expected in recent months. In Oct and Nov 2010 imports more than trebled to 69 Thd T, of which 27 Thd T from Ukraine, 20 Thd T from Moldova, 13 Thd T from Romania and 8 Thd T from Bulgaria.

Imports of sunflowerseed were smaller than expected at only 7 Thd T in Oct/Nov, but this does not yet include Ukrainian exports to Turkey of 13 Thd T in Nov.

Imports of 3 major oilmeals more than doubled from a year earlier to 167 Thd T in Oct/Nov 2010. The key origins for soya meal were the USA and Argentina, while 7 Thd T came from India. Sunflower meal originated mainly from Russia & Ukraine and rape meal from Russia (16 Thd T).

Imports of 6 vegetable oils recovered to 120 Thd T in Oct/Nov (mainly on account of palm and sun oils), but cumulative imports in Jan/Nov 2010 were still down 15%.

TURKEY : Imports of Oilseeds & Products (1000 T)

	Oct/Nov		Jan / Nov		
SEEDS	2010	2009	2010	2009	2008
Soybeans ...	122	60	1750	856	1121
Cottonseed ..	.	-	.	4	18
Sunseed	7	47	641	445	429
Rapeseed ...	69	20	263	98	210
Total	198	127	2654	1403	1778
OILS					
Soybean oil ..	1	.	9	9	20
Sunflower oil	24	9	204	319	358
Corn oil	7	9	50	82	81
Palm oil	62	58	367	347	412
Palmkernel oil	23	24	102	113	98
Coconut oil ..	4	2	19	12	14
Total	120	102	750	881	981
MEALS					
Soybean meal	87	48	392	342	331
Sunfl. meal ..	54	21	395	371	164
Rape meal ..	25	9	34	12	80
Total	167	78	821	725	575

AUSTRALIA: Exports of Canola & Products (1000 T)

	November		Jan/November		
	2010	2009	2010	2009	2008
Canola	57	28	1023	1030	466
EU-27	55	.	314	624	170
China, PR	-	-	-	44	-
Japan	1	2	189	111	102
Pakistan	-	26	452	196	138
U Arab Emir ..	-	-	39	22	54
Canola oil	9	5	91	60	71
Korea, South	2	4	30	19	21
Malaysia	1	.	13	11	2
Taiwan	2	-	10	1	8
New Zealand	3	1	21	16	16
Canola meal	1	1	22	3	2

World Market Prices on Next Page...

AUSTRALIA

Additional heavy rainfall was registered in southeast Queensland and parts of New South Wales during Jan 8-10, but very little canola is produced in the affected regions.

A first new-crop canola cargo of 55 Thd T was shipped to the European Union in November, with the Benelux countries reported as destination.

Increasing domestic crushings of canola resulted in sharp rises in canola oil and meal exports in 2010, primarily to Asian destinations.

OILSEEDS, CRUDE OILS, FATS, MEALS & GRAINS : Lowest Representative Asking Prices for Nearest Forward Shipment, in Bulk (excl. import duty, if any, US-$/Tonne)

	Jan 13 2011	Change	Jan 6 2011	Dec 29 2010	Dec 2010	Nov 2010	Jan 2010	Jan Dec 2010	Jan Dec 2009
Soybeans, Brazil, cif Rott	577 Mr	+0.9%	572 Mr	576 Mr	547(a)	532(a)	426(a)	455	447
Soybeans, U.S., cif Rotterdam	579 F	+2.1%	567 Ja	573 Ja	547	526	436	450	436
Soybeans, Argentina, cif Rott	588 Ap	+1.4%	580 Ap	584 Ap	550(b)	532(b)	417(b)	453	439
Soybean oil, US, fob Gulf	1294 Ja/Mr	+0.3%	1290 Ja/Mr	1278 Ja	1233	1144	845	936	786
Soybean oil,U.S.,fob Decatur(c)	1201	+0.6%	1194	1177	1135	1048	756	859	725
Soybean oil,Dutch, fob ex-mill	1399 F/Ap	+0.4%	1394 Ja	1353 Ja	1322	1247	923	1005	849
Soybean oil, Brazil, fob	1286 Ja	+0.6%	1278 Ja	1267 Ja	1232	1141	847	929	781
Soybean oil, Argentina, fob	1282 Ja/Mr	+0.7%	1273 Ja/Mr	1263 Ja	1229	1138	843	915	773
Soy.meal,44/45%,Hmb,fob exmill	461 F	+2.7%	449 Ja	455 Ja	436	428	407	391	420
Soy.pell, 47%, Arg, fob	437 Ja/Mr	+2.6%	426 Ja/Mr	418 Ja/Mr	406	396	369	343	379
Soy.pell,44/45%,Arg.cif Rott	459 F	+2.2%	449 F	447 Ja/Mr	433	429	404	378	408
Soy.pell,48%, Brazil, cif Rott	461 F	-0.6%	464 F	459 Ja/Mr	443	443	409	389	413
Soya meal,yell,48%,Mumbai, fas	405 Ja	-0.2%	406 Ja	408 Ja	402	411	413	384	419
Cotton oil,US, PBSY, fob Gulf	1360 Ja/Mr	+4.7%	1299 Ja/Mr	1276 Ja	1241	1184	905	963	814
Groundnuts, US Runners 40/50(d)	1580 Ja/F	0.0%	1580 Ja/F	1560 Ja/F	1520	1495	1213	1284	1160
Grnd'nt oil,any orig,cif Rott	1800 Ja/F	+2.0%	1750 Ja	1750 Ja	1753	1728	1316	1404	1184
Sunseed, EU, cif Amsterdam	713 Ja	+2.6%	695 Ja	683 Ja	689	693	434	518	379
Sunoil, EU, fob N.W.Eur. ports	1500 F/Mr	-0.7%	1510 F/Mr	1490 F/Mr	1454	1441	968	1074	855
Sunoil, Arg., fob	1370 Ja	0.0%	1370 Ja	1340 Ja	1311	1283	888	988	771
Sunoil, fob Black Sea	1385 F		..	1335 Ja	1327	1320	887	986	768
Sun.pell,37/38%,Arg.,cif Rott	277 F/My	+4.1%	266 Ja/Ap	273 D/F	271	275	216	..	194
Rapeseed,Europe,00,cif Hamburg	699 F	+1.3%	690 Ja/Mr	686 Ja/Mr	656	583	408	467	392
Rape oil,Dutch, fob ex-mill	1465 F/Ap	+0.8%	1453 F/Ap	1471 Ja	1396	1249	916	1013	859
Rape meal,34%,fob ex-mill Hmb	317 F/Ap	+5.0%	302 Ja	302 Ja	289	289	240	243	205
Corn oil, U.S., fob Midwest	1268 Ja/F	+2.7%	1235 Ja	1235 Ja	1234	1172	890	970	769
Corn oil, U.S., fob Gulf	1325 Ja/Mr	+0.4%	1320 Ja	1290 Ja	1303	1238	971	1048	877
Olive Oil,Spain,Extra Virgin(e)	2575 Ja	-1.5%	2613 Ja	2635 Ja	2711	2770	3011	2738	2895
Palm oil crude, cif N.W. Eur(f)	1270 Ja/F	-2.7%	1305 Ja	1280 Ja	1228	1109	793	901	683
Palm oil RBD, Mal, fob	1245 Ja/F	-2.0%	1270 Ja	1230 Ja	1196	1107	774	890	680
Palm oil crude, Indonesia, fob	1215 Ja/F	-4.0%	1265 Ja	1220 Ja	1172	1057	742	858	642
Palm olein RBD, Mal, fob	1255 Ja	-2.3%	1285 Ja	1250 Ja	1206	1100	787	895	702
Palm olein RBD, Mal, cif Rott	1330 Ja/F	-1.9%	1356 Ja	1320 Ja	1276	1170	855	963	767
Palm stearin RBD, Mal, fob	1210 Ja	-2.0%	1235 Ja	1205 Ja	1161	1076	725	865	613
Palm stearin RBD, Mal,cif Rott	1285 Ja	-1.6%	1306 Ja	1275 Ja	1231	1146	793	933	679
Palmkern oil,Mal/Indo,cif Rott	2050 F/Mr	-1.0%	2070 Ja/F	1980 Ja/F	1820	1626	878	1184	702
Palmkern exp,21/23%,cif Rott	228 F/Ap	+1.8%	224 F/Ap	222 Ja	213	210	121	166	102
Copra, Phil/Indo, cif N.W.Eur	1280 Ja/F	+1.6%	1260 Ja/F	1247 Ja/F	1154	1013	524	750	480
Coconut oil,Phil/Indo,cif Rott	1930 Ja/F	+0.8%	1915 Ja/F	1870 Ja/F	1715	1512	784	1124	726
Copra exp.pell. Phil. domestic	..		..	..	250	216	107	148	119
Lard, EU, unrefined, 0.5%(g)	1042 F/Mr	+0.8%	1034 F	1011 Ja	981	954	697	788	701
Fish oil,any orig,cif N.W.Eur	1700 Ja	0.0%	1700 Ja	1700 Ja	1555	1363	926	1122	789
Fish oil, Peru, fob	1600 Ja	0.0%	1600 Ja	1550 Ja	1400	1138	875	999	639
Fishmeal, 64/65%, Bremen fca	1544 Ja/Je	+2.6%	1505 Ja/Je	1511 D/F	1520	1609	1681	1688	1230
Fishmeal, Peru FAQ, fob	1340 Ja	-0.7%	1350 Ja	1320 Ja	1288	1315	1608	1518	1059
Linseed,Can,No.1,cif N.W.Eur.(h)	785 Ja	+0.6%	780 Ja	760 Ja	724	721	644	611	517
Lin oil,any orig,ex-tank Rott	1485 Ja	+0.4%	1479 Ja	1366 Ja	1334	1345	1156	1163	982
Lin meal,36%,Germany,fob Rhine(i)	521 Ja	+1.4%	514 Ja	511 Ja	512	548	440	440	369
Castor oil, ex-tank Rotterdam	2260 F	+6.6%	2120 F	2100 F	1970	1958	1563	1781	1343
Tung oil,S.America,ex-tank Rot	2720 Ja	+0.7%	2700 Ja	2720 Ja	2796	3069	2825	3138	2452
Tallow,US,bleach.fancy,cif Rot	1220 Ja	0.0%	1220 Ja	1180 Ja	1159	1063	738	877	681
Tallow, Edible, US, fob Gulf	1215 Ja	+1.3%	1200 Ja	1150 Ja	1135	1048	728	866	697
Wheat,U.S.,No.2,SRW, fob Gulf	317 Ja	-2.5%	325	..	320	288	197(j)	237	197
Corn,U.S.,No.3,Yellow,fob Gulf	270 Ja	+2.7%	263	..	256	251	165(j)	198	173

(a)March shipment. (b)April shipment. (c)Prompt. (d)Shelled basis; cif Rotterdam. (e)Domestic, fob ex-mill, max. 0.8% ffa. (f)5% ffa, Malaysian/ Indonesian origin. (g)Packers' lard ex-mill. (h)From Oct 2009 to Jan 2010 Russian origin. (i) From Oct 2009; 40% protein Fot Belgium. (j)1 week only.

Hamburg Market Prices - *On Jan 13 prices closed in EURO per tonne:*

Soya meal: fob ex-mill: Jan 346a, Feb/Apr 346a, May/Oct 337a.

Soya oil, crude: fob ex-mill: Feb/Apr 1060a, May/July 1065a.

Rape meal: fob ex-mill: Jan/Apr 240a, May/Jly 239a, Aug/Oct 195a.

Rape oil, refined: Jan/Feb 1190a, Mar/Apr 1175a, May/Jly 1170a.

Soybean Crush Conversions in Euro per tonne: First position +33 as of Jan 13 and +33 as of Jan 6

Rapeseed Crush Conversions in Euro per tonne: First position +46 as of Jan 13 and +44 as of Jan 6

Exchange Rate on Jan 13, 2011: 1 EUR = US-$ 1.3199 and on, Jan 6, 2011: 1 EUR = US-$ 1.3091 Dec 2010 : 1.3207, Nov 2010 : 1.3647, Dec 2009 : 1.4634

附件4：宏常公司歷年橄欖油及葡萄籽油進價及售價表
（G4卷第325-330頁）

宏常有限公司歷年橄欖油及葡萄籽油進價、售價表（元/KG）

96年度進貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均進貨價格
特級初榨橄欖油 Extra Virgin Olive Oil	147						133				137		139
精純橄欖油 Pure Olive Oil				131			132						131
橄欖殘渣油 Pomace Olive Oil													
葡萄籽油				109							114	114	112
96年度出貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均出貨價格
特級初榨橄欖油 Extra Virgin Olive Oil	389	389	389	389	389	389	389	389	389	389	389	389	389
精純橄欖油 Pure Olive Oil	389	389	389	389	389	389	389	389	389	389	389	389	389
橄欖殘渣油 Pomace Olive Oil													
葡萄籽油	289	289	289	289	289	289	289	289	289	289	289	289	289

97年度進貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均進貨價格
特級初榨橄欖油 Extra Virgin Olive Oil	141						158						150
精純橄欖油 Pure Olive Oil							156						156
橄欖殘渣油 Pomace Olive Oil													

葡萄籽油							119						119
97年度出貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均出貨價格
特級初榨橄欖油 Extra Virgin Olive Oil	389	389	332	332	332	332	389	389	338	338	338	338	353
精純橄欖油 Pure Olive Oil	389	389	332	332	332	332	389	389	338	338	338	338	353
橄欖殘渣油 Pomace Olive Oil													
葡萄籽油	289	289	289	289	289	289	289	289	289	289	289	289	289

98年度進貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均進貨價格
特級初榨橄欖油 Extra Virgin Olive Oil						108		107				113	109
精純橄欖油 Pure Olive Oil						108		107				113	109
橄欖殘渣油 Pomace Olive Oil													
葡萄籽油													
98年度出貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均出貨價格
特級初榨橄欖油 Extra Virgin Olive Oil	338	338	338	338	338	338	338	338	338	338	338	338	338
精純橄欖油 Pure Olive Oil	338	338	338	338	338	338	338	338	338	338	338	338	338
橄欖殘渣油 Pomace Olive Oil													

99年度進貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均進貨價格
特級初榨橄欖油 Extra Virgin Olive Oil											107	103	104
精純橄欖油 Pure Olive Oil											103	99	101
橄欖殘渣油 Pomace Olive Oil													
葡萄籽油			107						101				103
99年度出貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均出貨價格
特級初榨橄欖油 Extra Virgin Olive Oil	312	312	312	298	298	298	321	321	321	321	321	321	313
精純橄欖油 Pure Olive Oil	312	312	312	298	298	298	298	298	298	298	298	298	301
橄欖殘渣油 Pomace Olive Oil													
葡萄籽油	289	289	289	289	289	289	289	289	289	289	289	289	289

100年度進貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均進貨價格
特級初榨橄欖油 Extra Virgin Olive Oil								110					110
精純橄欖油 Pure Olive Oil										108	106		107

橄欖殘渣油 Pomace Olive Oil													
葡萄籽油							109						109
100年度出貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均出貨價格
特級初榨橄欖油 Extra Virgin Olive Oil	321	321	321	321	321	221	221	221	221	221	221	221	263
精純橄欖油 Pure Olive Oil	298	298	298	298	298	221	221	221	221	221	221	221	253
橄欖殘渣油 Pomace Olive Oil													
葡萄籽油	289	289	289	289	289	289	289	289	289	289	289	289	289

101年度進貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均進貨價格
特級初榨橄欖油 Extra Virgin Olive Oil		67	103				99			70	99	99	89
精純橄欖油 Pure Olive Oil			100			96	96			93	94	94	96
橄欖殘渣油 Pomace Olive Oil													
葡萄籽油										96			96
101年度出貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均出貨價格
特級初榨橄欖油 Extra Virgin Olive Oil	221	221	221	221	221	221	221	221	221	221	221	221	221
精純橄欖油 Pure Olive Oil	221	221	221	221	221	221	221	221	221	221	221	221	221

102年度進貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均進貨價格
特級初榨橄欖油 Extra Virgin Olive Oil	99									141			120
精純橄欖油 Pure Olive Oil	94						123	126					114
橄欖殘渣油 Pomace Olive Oil													
葡萄籽油			103				106						104
102年度出貨價格	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	年平均出貨價格
特級初榨橄欖油 Extra Virgin Olive Oil	221	221	221	221	221	221	221	221	221	221	221	221	221
精純橄欖油 Pure Olive Oil	221	221	221	221	221	221	221	221	221	221	221	221	221
橄欖殘渣油 Pomace Olive Oil													
葡萄籽油	220	220	220	220	220	220	220	220	220	220	220	220	220

	96-102年進貨價格最高值	96-102年進貨價格最低值	96-102年進貨價格平均值
特級初榨橄欖油 Extra Virgin Olive Oil	158	67	118

精純橄欖油 Pure Olive Oil	156	93	117
橄欖殘渣油 Pomace Olive Oil			
葡萄籽油	119	96	108

附件5　關稅署統計橄欖原油自96年起至102年10月止進口之重量及價格

	年度	中文貨名	英文貨名	重量（公斤）	起岸價格（千元）	平均價格（元/公斤）
1	096年	橄欖原油	Virgin olive oil	663,119	91,718	140
2	097年	橄欖原油	Virgin olive oil	752,984	119,333	160
3	098年	橄欖原油	Virgin olive oil	879,674	132,617	150
4	099年	橄欖原油	Virgin olive oil	1,043,857	148,715	140
5	100年	橄欖原油	Virgin olive oil	1,371,561	190,751	140
6	101年	橄欖原油	Virgin olive oil	1,669,361	222,160	130
7	102年1月至10月	橄欖原油	Virgin olive oil	1,355,796	227,249	170

資料來源：G3卷第300頁反面

備註：1.重量係以淨重（不含包材）計算。

2.我國關稅估價，進口採起岸價格（CIF），出口採離岸價格（FOB）為基準，故完稅價格基本上會與起岸價格一致。

附件6　關稅署精製橄欖油及其餾分物自96年起至102年10月止進口之重量及價格

	年度	中文貨名	英文貨名	重量（公斤）	起岸價格（千元）	平均價格（元/公斤）
1	096年	精製橄欖油及其餾分物	Refined olive oil and its fractions	3,096,349	450,679	150
2	097年	精製橄欖油及其餾分物	Refined olive oil and its fractions	3,131,111	485,561	160
3	098年	精製橄欖油及其餾分物	Refined olive oil and its fractions	2,653,954	361,394	140
4	099年	精製橄欖油及其餾分物	Refined olive oil and its fractions	2,654,195	343,636	130
5	100年	精製橄欖油及其餾分物	Refined olive oil and its fractions	3,980,997	445,958	110
6	101年	精製橄欖油及其餾分物	Refined olive oil and its fractions	3,982,298	424,528	110
7	102年1月至10月	精製橄欖油及其餾分物	Refined olive oil and its fractions	3,849,045	505,902	130

資料來源：G3卷第301頁

備註：1. 重量係以淨重（不含包材）計算。

2. 我國關稅估價，進口採起岸價格（CIF），出口採離岸價格（FOB）為基準，故完稅價格基本上會與起岸價格一致。

附件7　關稅署統計葡萄籽油自98年起至102年止進口之重量及價格

	年度	英文貨名	淨重（公斤）	完稅價格（千元）	平均價格（元/公斤）
1	098年	AR202 GRAPE SEED OIL MASSAGE TREATMENT 500ML 葡萄籽油等	98,888	10,594,886	107.14
2	099年	C2944 OIL （日清 純葡萄籽油）（內容量:460公克） EXP:2011.04.29等	86,457	8,192,461	94.76
3	100年	6024 GRAPESEED OIL 6X1LT YIDU NR BRAND:MONTEVERDE（葡萄籽油1公升裝）等	84,754	8,172,458	96.43
4	101年	C2944 OIL（日清 純葡萄籽油）（內容量:400公克）EXP:2013.05.08等	125,733	14,321,947	113.91
5	102年	3936 WHITE GRAPE SEED OIL 1x25LT BRAND:MONTEVERDE（葡萄籽油25公升裝）等	3,314	335,469	101.23

資料來源：G16卷第36-40頁

備註：1.重量係以淨重（不含包材）計算。

2.我國關稅估價，進口採起岸價格（CIF），出口採離岸價格（FOB）為基準，故完稅價格基本上會與起岸價格一致。

附件８：頂新公司橄欖油原料品質檢驗表與味全公司作業標準書之成品規格檢驗項目對照表

項目	93/05/20 頂新公司橄欖油原料品質檢驗表(甲 14 卷第 105 頁)	96/07/09 味全公司作業標準書原案 PF-189 橄欖油(甲 14 卷第 259 頁)	97/08/01 頂新公司橄欖油原料品質檢驗表(G16 卷第 100 頁)	98/11/20~102/07/04 頂新公司橄欖油原料品質檢驗表(G10 卷第 28 頁)
外觀	金黃色澄清油狀液體	金黃色明亮澄清油狀液體	澄清油狀液體	澄清油狀液體
風味	良好，具橄欖油香味	具溫和橄欖油氣味，無油耗等不良風味	良好，無油耗味等不良風味	良好，無油耗味等不良風味
色澤	紅色 R 值：1.2~2.2 黃色 Y 值：40~72	紅色 R 值：1.1~2.2 黃色 Y 值：38~72	紅色 R 值：1.1~2.2 黃色 Y 值：38~72	紅色 R 值：1.1~2.2 黃色 Y 值：38~70
夾雜物	不得含任何夾雜物	不得含有成分以外之夾雜物	不得含任何夾雜物	不得含任何夾雜物
酸價	0.4 以下	0.4 以下	0.4 以下	0.4 以下
過氧化價	7 以下	10 以下	5 以下	5 以下
水份及揮發物	0.1 以下	0.1%以下	0.1 以下	0.1 以下
K-232	3.0	無規定	無規定	無規定
K-270	0.8	無規定	無規定	無規定
碘價	無規定	無規定	75~94	75~94
油酸(C18:1)	71~81%	55~83%	71~81%	71~81
亞麻油酸(C18:2)	2~21%	3.5~21%	2~21%	2~21
次亞麻油酸	1.5%以下	1.5%以下	1.5%以下	1.5 以下

項目	93/05/20 頂新公司橄欖油原料品質檢驗表(甲 14 卷第 105 頁)	96/07/09 味全公司作業標準書原案 PF-189 橄欖油(甲 14 卷第 259 頁)	97/08/01 頂新公司橄欖油原料品質檢驗表(G16 卷第 100 頁)	98/11/20~102/07/04 頂新公司橄欖油原料品質檢驗表(G10 卷第 28 頁)
(C18:3)				
芥酸 (C22:1)	不得檢出	無規定	不得檢出	5 以下

附件9　頂新公司就大統公司提供之橄欖油原料油所作「原料品質檢驗表」及原始數據資料整理

	項　　目									判 定	卷別頁碼
	C18:1		C18:2		C18:3		C22:1（芥酸）				
日　　期	頂新規格	檢驗結果	頂新規格	檢驗結果	頂新規格	檢驗結果	頂新規格	CNS 標準	檢驗結果		
(1) 97.08.01.	71~81	79.98	2~21	10.23	1.5 以下	1.37	不得檢出	未檢出	未檢出	OK	G16 P.100 反
(2) 98.11.20.	71~81	75.11	2~21	12.49	1.5 以下	0.26	5 以下	未檢出	未檢出	核收	A12 P.54、A11P.146
(3) 99.01.27.	71~81	72.32	2~21	14.12	1.5 以下	0.30	5 以下	未檢出	未檢出	核收	A12 P.52
(4) 99.06.30.(綠)	71~81	77.27	2~21	11.84	1.5 以下	0.74 原始圖譜為 0.27	5 以下	未檢出	未檢出	核收	A12 P.53
(5) 99.12.21.	71~81	79.00	2~21	9.51	1.5 以下	0.41	5 以下	未檢出	未檢出	核收	A12 P.55
(6)100.03.15.	71~81	78.35	2~21	10.07	1.5 以下	0.68	5 以下	未檢出	0.58	核收	A12 P.56
(7)100.03.15.(綠)	71~81	79.01	2~21	10.82	1.5 以下	0.63	5 以下	未檢出	0.52	核收	A12 P.57
(8)100.03.24.(綠)	71~81	78.96	2~21	10.58	1.5 以下	0.66	5 以下	未檢出	0.50	核收	A12 P.58
(9)100.03.24.	71~81	78.32	2~21	10.11	1.5 以下	0.67	5 以下	未檢出	0.50	核收	A12 P.59
(10)100.11.18.	71~81	78.72	2~21	10.17	1.5 以下	0.68	5 以下	未檢出	未檢出	核收	A12 P.60
(11)100.11.22.	71~81	78.72	2~21	10.17	1.5 以下	0.68	5 以下	未檢出	未檢出	核收	A12 P.61
(12)100.12.02.	71~81	78.38	2~21	10.12	1.5 以下	0.17	5 以下	未檢出	0.43	核收	A12 P.62
(13)101.05.09.	71~81	78.53	2~21	9.79	1.5 以下	0.40	5 以下	未檢出	0.61	核收	A12 P.63
(14)101.05.09(綠)	71~81	77.44	2~21	10.67	1.5 以下	0.34	5 以下	未檢出	0.56	核收	A12 P.64
(15)102.01.18(綠)	71~81	71.89	2~21	13.80	1.5 以下	0.42	5 以下	未檢出	0.78	核收	A12 P.65
(16)102.03.01(綠)	71~81	71.40	2~21	15.06	1.5 以下	1.04	5 以下	未檢出	未檢出	核收	A12 P.65 反
(17)102.03.06.	71~81	72.17	2~21	13.31	1.5 以下	0.03	5 以下	未檢出	未檢出	核收	A12 P.67
(18)102.07.04	71~81	74.24	2~21	15.14	1.5 以下	0.39	5 以下	未檢出	0.68	核收	A12 P.68
(19)102.07.26(綠)	71~81	71.57	2~21	14.63	1.5 以下	1.11	5 以下	未檢出	未檢出	核收	A12 P.70
(20)102.07.26.	55~83	71.39	3.5~21	14.33	無此項	—	未檢出	未檢出	未檢出	核收	A12 P.69
(21)102.09.05.(綠)	55~83	69.55	3.5~21	15.90	無此項	—	5 以下	未檢出	未檢出	核收	A11 P.7 反、126
(22)102.09.06.	55~83	72.20	3.5~21	13.32	無此項	—	未檢出	未檢出	未檢出	核收	A12 P.71

附件10　食用橄欖油-相關中華民國國家標準（CNS）及衛福部資料庫資料
（A2卷第64-66頁、A11卷第26-31頁、本院卷二第227-229頁）

中國國家標準 CNS

食用橄欖油

總號 4837
類號 N5149

Edible olive oil

1. 適用範圍：本標準適用於由橄欖果肉製得之食用橄欖油。
2. 用語釋義
   2.1 冷壓橄欖油：橄欖經過機械/物理性壓榨、過濾及離心等步驟，未經過化學或熱處理而改變其原有特性者稱之。
   2.2 精製橄欖油：不適合直接食用之冷壓橄欖油，經過脫膠、脫酸、脫色及脫臭等加工步驟製成者稱之。
   2.3 混合橄欖油：係以冷壓橄欖油及精製橄欖油混合而成適合食用者稱之。
3. 品質應符合下表之規定。

項目 \ 等級	冷壓橄欖油	精製橄欖油	混合橄欖油
一般性狀	澄清，有橄欖油特有之香味，無異味	澄清透明無沉澱物，無異味	澄清，風味良好
顏色	黃至綠色	黃色	黃至淺綠色
水分及揮發物(%m/m)	0.20以下	0.10以下	0.10以下
夾雜物(%m/m)	0.10以下	0.05以下	0.05以下
比重(20℃/20℃)	0.910～0.916		
折射率(ND20℃)	1.4677～1.4705		
碘價(Wijs)	75～94		
酸價(mg KOH/g Oil)	6.6以下	0.6以下	3.0以下
皂化價(mg KOH/g Oil)	184～196		
不皂化物(%)	1.5以下		
過氧化價(milliequivalents of active oxygen/kg Oil)	20以下	10以下	15以下
脂肪酸組成(%)	依CNS14759〔食用油脂檢驗法－脂肪酸甲酯之測定〕之附錄		

公布日期 68年4月24日　經濟部標準檢驗局印行　修訂公布日期 92年10月9日
印行年月 92年10月

本標準非經本局同意不得翻印

4.內容量：不低於標示量。

5.摻雜物：本品不得摻有其他油類。

6.衛生要求：應符合本國有關衛生法令之規定。

7.包裝及標示：本品應爲罐、瓶裝或桶裝，其包裝材料應符合行政院衛生署公告之『食品器具、容器、包裝衛生標準』；其瓶蓋及附貼或直接印於包裝外之標示，應完整無損，並符合我國有關衛生法令及 CNS 3192〔包裝食品標示〕之規定。

8.檢驗：本品之檢驗依 CNS 3639〔食用油脂檢驗法－總則〕。

參考標準：CODEX STAN 210-1999 Standard for named vegetable oils

CODEX STAN33-1981 (Rev.2-1999) Olive Oil，Virgin and Refined ，and for Refined Olive-Pomace Oil

引用標準：CNS 3192　包裝食品標示

CNS 3639　食用油脂檢驗法－總則

CNS14759　食用油脂檢驗法－脂肪酸甲酯之測定

修訂日期：第一次修訂：70 年 6 月 18 日

第二次修訂：77 年 5 月 12 日

第三次修訂：78 年 9 月 19 日

ICS 67.200.10

中華民國國家標準 CNS	食用油脂檢驗法－脂肪酸甲酯之測定	總號	14759
		類號	N6370

Method of test for edible oils and fats – Determination of methyl esters of fatty acids

1. 適用範圍：本標準規定脂肪酸甲酯的測定方法。包括脂肪酸甲酯的製備及氣相層析法(GC)。

2. 甲酯化方法：動物性及植物性油脂、脂肪酸和皂化物質(soaps)中脂肪酸甲酯的製備，分別為三氟化硼(BF3)法、Trimethylsulfonium hydroxide (TMSH)法及轉酯化(Trans-esterification)法等三種方法。

2.1 三氟化硼(BF3)法(1、2)：適用於大部分的油脂及其衍生物（脂肪酸、皂物質）。除外的有乳脂肪及含有特殊官能基(酮基、環氧基、烴基、過氧化氫基、環丙基、環丙烯基等)之脂肪酸及乙炔化脂肪酸的酯類。短鏈脂肪酸，如已酸(C6)，以此法分析，具 75%的回收率。

2.1.1 原理：以氫氧化鈉甲醇溶液，將甘油酯皂化，再加入三氟化硼甲醇溶液，將皂化物轉換成甲基酯化物。分析純脂肪酸和皂物質時，不需再與氫氧化鈉進行皂化反應，可直接與三氟化硼甲醇溶液反應而得甲基酯化物。

2.1.2 器具及材料

2.1.2.1 錐形瓶：50 mL 或 100 mL，具磨砂瓶口和磨砂瓶塞。

2.1.2.2 迴流式冷凝管：長度 20 cm～30 cm，具磨砂接口，可與錐形瓶接合。

2.1.2.3 助沸物：沸石，不含油脂。

2.1.2.4 刻度吸管：10 mL。

2.1.2.5 樣品瓶：4 mL，具螺旋蓋。

2.1.2.6 分析天平：可稱至 0.001 g。

2.1.3 試藥：去離子水、異辛烷([3])（2,2,4-三甲基戊烷）、飽和氯化鈉溶液、無水硫酸鈉均為分析級。三氟化硼(BF_3)甲醇溶液〔12 -15% (w/w)〕，商品化之三氟化硼甲醇溶液 14%、20%與 505 均可購得。自行配製三氟化硼溶液時須於抽器櫃中進行，取甲醇溶液於燒杯中，置於冰浴內，再將三氟化硼以玻璃注射筒緩慢的浸入甲醇中注入，注意不要讓溶液倒流回注射筒內，再緩慢取出注射筒，亦須注意不可讓白煙噴出燒杯外。

2.1.3.1 氫氧化鈉甲醇溶液(0.5 mol/L)：溶解 2 g 的氫氧化鈉於 100 mL 的甲醇中，甲醇含水量不得超過 0.5% (w/w)。若溶液須保存一段時間，可能會有少量的碳酸鈉白色沉澱產生。但是，這些沉澱物質對甲基酯化物的製備並無影響。

公布日期 92 年 7 月 29 日　經濟部標準檢驗局印行　修訂公布日期 98 年 7 月 16 日

印行年月 98 年 7 月

本標準非經本局同意不得翻印

表 1　以氣相層析儀測定植物油脂之脂肪酸組成

CNS	193	749	2242	2271	2832	3049	3527	4832	4833	4834	4835	4836	4837		7527	7528	14767	14768	14874	14875
脂肪酸組成	花生油	大豆油	米油	芥花油(低芥酸)	芝麻油	紅花籽油	玉米油	棉籽油	葵花籽油	椰子油	棕櫚仁油	棕櫚油	橄欖油	橄欖粕油	軟質棕油	硬質棕油	高油酸紅花籽油	高油酸葵花籽油	中油酸葵花籽油	葡萄籽油
C6:0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND-0.7	ND-0.8	ND	–	–	ND	ND	ND	ND	ND	ND
C8:0	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6-10.0	2.4-6.2	ND	–	–	ND	ND	ND	ND	ND	ND
C10:0	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0-8.0	2.6-5.0	ND	–	–	ND	ND	ND	ND	ND	ND
C12:0	ND-0.1	ND-0.1	ND-0.2	ND	ND	ND	ND-0.3	ND-0.2	ND-0.1	45.1-53.2	45.0-55.0	ND-0.5	ND	ND	0.1-0.5	0.1-0.5	ND-0.2	ND	ND	ND
C14:0	ND-0.1	ND-0.2	0.2-0.6	ND-0.2	ND-0.1	ND-0.2	ND-0.3	0.6-1.0	ND-0.2	16.8-21.0	14.0-18.0	0.5-2.0	≦0.05	≦0.05	0.5-1.5	1.0-2.0	ND-0.2	ND-0.1	ND-0.1	ND-0.3
C16:0	8.0-14.0	8.0-13.5	14-23	2.5-7.0	7.9-12.0	5.3-8.0	8.6-16.5	21.4-26.4	5.0-7.6	7.5-10.2	6.5-10.0	39.3-47.5	7.5-20.0	7.5-20.0	38.0-43.5	48.0-74.0	3.6-6.0	2.6-5.0	4.0-5.5	5.5-11.0
C16:1	ND-0.2	ND-0.2	ND-0.5	ND-0.6	ND-0.2	ND-0.2	ND-0.5	ND-1.2	ND-0.3	ND	ND-0.2	ND-0.6	0.3-3.5	0.3-3.5	ND-0.6	ND-0.2	ND-0.2	ND-0.1	ND-0.05	ND-1.2
C17:0	ND-0.1	ND-0.1	ND	ND-0.3	ND-0.2	ND-0.1	ND-0.1	ND-0.1	ND-0.2	ND	ND	ND-0.2	≦0.3	≦0.3	ND-0.2	ND-0.2	ND-0.1	ND-0.1	ND-0.05	ND-0.2
C17:1	ND-0.1	ND-0.1	ND	ND-0.3	ND-0.1	ND-0.1	ND-0.1	ND-0.1	ND-0.1	ND	ND	ND	≦0.3	≦0.3	ND-0.1	ND-0.1	ND-0.1	ND-0.1	ND-0.06	ND-0.1
C18:0	1.0-4.5	2.0-5.4	0.9-2.5	0.8-3.0	4.5-6.7	1.9-2.9	ND-3.3	2.1-3.3	2.7-6.5	2.0-4.0	1.0-1.3	3.5-6.0	0.5-5.0	0.5-5.0	3.5-5.0	3.9-6.0	1.5-2.4	2.9-6.2	2.1-5.0	3.0-6.5
C18:1	35.0-69.0	17.0-30.0	38-46	51.0-70.0	34.4-45.5	8.4-21.3	20.0-42.2	14.7-21.7	14.0-39.4	5.0-10.0	12.0-19.0	36.0-44.0	55.0-83.0	55.0-83.0	39.8-46.0	15.5-36.0	74.0-83.7	75.0-90.7	43.1-71.8	12.0-28.0
C18:2	12.0-43.0	48.0-59.0	29-40	15.0-30.0	36.9-47.9	67.8-83.2	34.0-65.6	46.7-58.2	48.3-74.0	1.0-2.5	1.0-3.5	9.0-12.0	3.5-21.0	3.5-21.0	10.0-13.5	3.0-10.0	9.0-19.9	2.1-17	18.7-45.3	58.0-78.0
C18:3	ND-0.3	4.5-11.0	0.1-2.9	5.0-14.0	0.2-1.0	ND-0.1	ND-2.0	ND-0.4	ND-0.5	ND-0.2	ND-0.2	ND-0.5	–	–	ND-0.6	ND-0.5	ND-1.2	ND-0.3	ND-0.5	ND-1.0
C20:0	1.0-2.0	0.1-0.6	ND-0.9	0.2-1.2	0.3-0.7	0.2-0.4	0.3-1.0	0.2-0.5	0.1-0.5	ND-0.2	ND-0.2	ND-1.0	≦0.6	≦0.6	ND-0.6	ND-0.1	0.3-0.6	0.2-0.5	0.2-0.4	ND-1.0
C20:1	0.7-1.7	ND-0.5	ND-0.8	0.1-4.3	ND-0.3	0.1-0.3	0.2-0.6	ND-0.1	ND-0.3	ND-0.2	ND-0.2	ND-0.4	≦0.4	≦0.4	ND-0.4	ND-0.4	0.1-0.5	0.1-0.5	0.2-0.3	ND-0.3
C20:2	ND	ND-0.1	ND	ND-0.1	ND	ND	ND-0.1	ND-0.1	ND	ND	ND	ND	–	–	ND	ND	ND	ND	ND	ND
C22:0	1.5-4.5	ND-0.7	ND-0.5	ND-0.6	ND-1.1	ND-1.0	ND-0.5	ND-0.6	0.3-1.5	ND	ND-0.2	ND-0.2	≦0.2	≦0.3	ND-0.2	ND-0.2	ND-0.4	0.5-1.6	0.6-1.1	ND-0.5
C22:1	ND-0.3	ND-0.3	ND	ND-2.0	ND	ND-1.8	ND-0.3	ND-0.3	ND-0.3	ND	ND	ND	ND	ND	ND	ND	ND-0.3	ND-0.3	ND	ND-0.3
C22:2	ND	ND	ND	ND-0.1	ND	ND	ND	ND-0.1	ND-0.3	ND	ND	ND	–	–	ND	ND	ND	ND	ND-0.09	ND
C24:0	0.5-2.5	ND-0.5	ND-0.6	ND-0.3	ND-0.3	ND-0.2	ND-0.5	ND-0.1	ND-0.5	ND	ND	ND	≦0.2	≦0.2	ND	ND	ND-0.3	ND-0.5	0.3-0.4	ND-0.4
C24:1	ND-0.3	ND	ND	ND-0.4	ND	ND-0.2	ND	ND	ND	ND	ND	ND	–	–	ND	ND	ND-0.3	ND	ND	ND

ND-未檢出，≦0.05%

S 67.200.10
中華民國國家標準
CNS

食用橄欖油與橄欖粕油

總號 4837
類號 N5149

Edible olive oils and olive pomace oils

1. 適用範圍：本標準適用於完全由橄欖樹(*Olea europaea* L.)果實製得之食用橄欖油及食用橄欖粕油。

2. 用語釋義

2.1 冷壓橄欖油(Virgin olive oil)：係指橄欖經清洗、機械/物理性壓榨、過濾及離心外，未經其他方法處理，且未摻入任何其他油類製得者。包括特級冷壓橄欖油(Extra virgin olive oil)、良級冷壓橄欖油(Virgin olive oil)及普級冷壓橄欖油(Ordinary virgin olive oil) 3 種。

2.2 精製橄欖油(Refined olive oil)：冷壓橄欖油經脫膠、脫酸、脫色及/或脫臭等加工步驟（再酯化(re-esterification)製程除外），且未摻入任何其他油類製得者。

2.3 橄欖油(Olive oil)：係以冷壓橄欖油及精製橄欖油混合而成，且未摻入任何其他油類製得者。

2.4 精製橄欖粕油(Refined olive-pomace oil)：橄欖粕以溶劑或其他物理方法提油，並經脫膠、脫酸、脫色及/或脫臭等加工步驟（再酯化製程除外），且未摻入任何其他油類製得者。

2.5 橄欖粕油(Olive-pomace oil)：係以冷壓橄欖油及精製橄欖粕油混合而成，且未摻入任何其他油類製得者。

3. 品質應符合下表之規定。

公布日期 84 年 4 月 24 日
經濟部標準檢驗局印行
修訂公布日期 98 年 7 月 16 日
印行年月 98 年 7 月

本標準非經本局同意不得翻印

表 1

項目 \ 等級	冷壓橄欖油 特級	冷壓橄欖油 良級	冷壓橄欖油 普級	精製橄欖油	橄欖油	精製橄欖粕油	橄欖粕油
一般性狀	澄清，有橄欖油特有之香味，無異味			澄清透明，無沉澱物，無異味	澄清，風味良好	澄清透明，無沉澱物，無異味	澄清，風味良好
顏色	黃至綠色			黃色	黃至淺綠色	黃至褐黃色	黃至淺綠色
水分及揮發物(%m/m)	0.20以下			0.10以下			
夾雜物(%m/m)	0.10以下			0.05以下			
比重(20℃/20℃)	0.910～0.916						
折射率(ND20℃)	1.4677～1.4705					1.4680～1.4707	
碘價(Wijs)	75～94					75～92	
酸價(mg KOH/g Oil)	≦1.6	≦4.0	≦6.6	≦0.6	≦2.0	≦0.6	≦2.0
皂化價(mg KOH/g Oil)	184～196					182～193	
不皂化物(%)	≦1.5					≦3.0	
總固醇(mg/kg)	≧1,000					≧1800	≧1600
角鯊烯(mg/kg)	≦250			≦350		>350	
紅二醇(Erythrodiol)及熊果醇(uvaol)(%total sterol)	≦4.5					>4.5	
UV 270 nm吸光值	≦0.22	≦0.25	≦0.30	≦1.10	≦0.9	≦2	≦1.7
Delta K	≦0.01			≦0.16	≦0.15	≦0.20	≦0.18
UV 232吸光值	≦2.50	≦2.60	–	–	–	–	–
過氧化價(milliequivalents of active oxygen/kg Oil)	≦20			≦5	≦15	≦5	≦15

表 1（續上頁）

項目 ＼ 等級		冷壓橄欖油			精製橄欖油	橄欖油	精製橄欖粕油	橄欖粕油
		特級	良級	普級				
脂肪酸組成(%)	C6：0	–						
	C8：0	–						
	C10：0	–						
	C12：0	ND						
	C14：0	≦0.05						
	C16：0	7.5-20.0						
	C16：1	0.3-3.5						
	C17：0	≦0.3						
	C17：1	≦0.3						
	C18：0	0.5-5.0						
	C18：1	55.0-83.0						
	C18：2	3.5-21.0						
	C18：3	–						
	C20：0	≦0.6						
	C20：1	≦0.4						
	C20：2	–						
	C22：0	≦0.2					≦0.3	
	C22：1	ND						
	C22：2	–						
	C24：0	≦0.2						
	C24：1	–						
反式脂肪酸(%)	C18：1 T	≦0.05			≦0.20		≦0.40	
	C18：2 T+C18：3 T	≦0.05			≦0.30		≦0.35	

. 內容量：不低於標示量。

. 衛生要求：應符合本國有關衛生法令之規定。

. 包裝及標示：本品應為罐、瓶裝或桶裝，其包裝材料應符合行政院衛生署公布之「食品器具、容器、包裝衛生標準」；其瓶蓋及附貼或直接印於包裝外之標示，應完整無損，並符合我國有關衛生法令及 CNS 3192〔包裝食品標示〕之規定。精製或混合橄欖粕油，在標示上必須註明，不可以橄欖油標示。

檢驗：本品之檢驗依 CNS 3639〔食用油脂檢驗法－總則〕。

引用標準：CNS 3192　包裝食品標示
CNS 3639　食用油脂檢驗法－總則
食品器具、容器、包裝衛生標準

相對應國際標準：CODEX STAN 33-1981 (Rev.2-2003), CODEX STANDARD FOR OLIVE OILS AND OLIVE POMACE OILS

修訂日期：第一次修訂：70 年 6 月 18 日
第二次修訂：77 年 5 月 12 日
第三次修訂：78 年 9 月 19 日
第四次修訂：92 年 10 月 9 日

通關樣張，僅供參考

中華民國國家標準

CNS

食用橄欖油及橄欖粕油

總號 4837

類號 N5149

Edible olive oil and olive pomace oil

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本標準經標準檢驗局授權經銷 正 107.02.20 中華電信數據通信分公司 本

經濟部標準檢驗局 下載帳號 cns 下載時間 2018/02/26 09:42:43 下載位置 172.16.173.28

(共6頁)

公布日期 68年4月24日 經濟部標準檢驗局印行 修訂公布日期 104年9月23日

印行年月 104年9月

本標準非經本局同意不得翻印

前言

本標準係依標準法之規定，經國家標準審查委員會審定，由主管機關公布之中華民國國家標準。CNS 4837:2009 已經修訂並由本標準取代。

依標準法第四條之規定，國家標準採自願性方式實施。但經各該目的事業主管機關引用全部或部分內容為法規者，從其規定。

本標準並未建議所有安全事項，使用本標準前應適當建立相關維護安全與健康作業，並且遵守相關法規之規定。

本標準之部分內容，可能涉及專利權、商標權與著作權，主管機關及標準專責機關不負責任何或所有此類專利權、商標權與著作權之鑑別。

本標準經標準檢驗局授權經銷
正 107.02.23 本
中華電信數據通信分公司

經濟部標準檢驗局 下載帳號 cns 下載時間 2018/02/26 09:42:43 下載位置 172.16.173.28

1. 適用範圍

本標準適用於完全由橄欖樹(*Olea europaea* L.)果實製得之食用橄欖油及食用橄欖粕油。

2. 引用標準

下列標準因本標準所引用，成為本標準之一部分。有加註年分者，適用該年分之版次，不適用其後之修訂版(包括補充增修)。無加註年分者，適用該最新版(包括補充增修)。

CNS 3192	包裝食品標示
CNS 3639	食用油脂檢驗法－總則
ISO 3656:2011	Animal and vegetable fats and oils – Determination of ultraviolet absorbance expressed as specific UV extinction
ISO 12228-2:2014	Determination of individual and total sterols contents – Gas chromatographic method – Part 2: Olive oils and olive pomace oils
ISO 15788-1:1999	Animal and vegetable fats and oils – Determination of stigmastadienes in vegetable oils – Part 1: Method using capillary-column gas chromatography (Reference method)

食品器具容器包裝衛生標準

3. 用語及定義

下列用語及定義適用於本標準。

3.1 初榨橄欖油(virgin olive oil)

係指橄欖果經清洗、機械/物理性壓榨、過濾及離心外，未經其他方法處理。包括特級初榨橄欖油(extra virgin olive oil)、良級初榨橄欖油(virgin olive oil)及普級初榨橄欖油(ordinary virgin olive oil) 3 種。

3.2 精製橄欖油(refined olive oil)

壓榨所得之橄欖油，再經脫膠、脫酸、脫色、脫臭等加工步驟[再酯化(re-esterification)製程除外]而成者稱之。

3.3 橄欖油(olive oil)

係以初榨橄欖油及精製橄欖油混合而成者稱之。

3.4 精製橄欖粕油(refined olive pomace oil)

初榨後之橄欖粕以溶劑或其他物理方法提油，再經脫膠、脫酸、脫色、脫臭等加工步驟[再酯化(re-esterification)製程除外]而得者稱之。

3.5 橄欖粕油(olive pomace oil)

係以初榨橄欖油及精製橄欖粕油混合而得者稱之。

4. 品質

應符合表 1 之規定。

經濟部標準檢驗局 下載帳號 cns 下載時間 2018/02/26 09:42:43
正 107.02.23 本
本標準經標準檢驗局授權經濟部
中華電信數據通信分公司

表 1　食用橄欖油及食用橄欖粕油品質要求

項目	初榨橄欖油			精製橄欖油	橄欖油	精製橄欖粕油	橄欖粕油
	特級	良級	普級				
一般性狀	澄清，有橄欖油特有之香味，無異味			澄清透明，無沉澱物，無異味	澄清，風味良好	澄清透明，無沉澱物，無異味	澄清，風味良好
顏色	黃至綠色			淡黃色	淡黃至綠色	淡黃至褐黃色	黃至淺綠色
水分及揮發物(%m/m)	0.20 以下			0.10 以下			
夾雜物(%m/m)	0.10 以下			0.05 以下			
比重(20 ℃/20 ℃)	0.910～0.916						
折射率(ND 20 ℃)	1.4677～1.4705					1.4680～1.4707	
碘價(Wijs)	75～94					75～92	
酸價(mg KOH/g Oil)	≦1.6	≦4.0	≦6.6	≦0.6	≦2.0	≦0.6	≦2.0
游離酸度(Free acidity) (g oleic acid/ 100g Oil)	≦0.8	≦2.0	≦3.3	≦0.3	≦1.0	≦0.3	≦1.0
皂化價(mg KOH/g Oil)	184～196					182～193	
不皂化物(%)	≦1.5					≦3.0	
總固醇(mg/kg)	≧1,000					≧1,800	≧1,600
豆甾二烯(Stigmastadienes)含量(mg/kg)	≦0.05		≦0.10	—		—	
蠟質(mg/kg)	≦250			≦350		>350	
紅二醇(Erythrodiol)及熊果醇(uvaol)(% total sterol)	≦4.5					>4.5	
UV 270 nm 或 UV 268 nm 吸光值	≦0.22	≦0.25	≦0.30	≦1.10	≦0.90	≦2.00	≦1.70
Delta K	≦0.01			≦0.16	≦0.15	≦0.20	≦0.18
UV 232 nm 吸光值	≦2.50	≦2.60	—	—	—	—	—
過氧化價(milliequivalents of active oxygen/kg Oil)	≦20			≦5	≦15	≦5	≦15

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表 1　食用橄欖油及食用橄欖粕油品質要求(續)

項目		初榨橄欖油			精製橄欖油	橄欖油	精製橄欖粕油	橄欖粕油
		特級	良級	普級				
	C12：0	≦0.05						
	C14：0	≦0.05						
	C16：0	7.5～20.0						
	C16：1	0.3～3.5						
	C17：0	≦0.3						
	C17：1	≦0.3						
	C18：0	0.5～5.0						
	C18：1	55.0～83.0						
	C18：2	3.5～21.0						
	C20：0	≦0.6						
	C20：1	≦0.4						
	C22：0	≦0.2					≦0.3	
	C22：1	≦0.05						
	C24：0	≦0.2						
反式脂肪酸(%)	C18：1 T	≦0.05			≦0.20		≦0.40	
	C18：2 T+C18：3 T	≦0.05			≦0.30		≦0.35	

5. 內容量

不低於標示量。

6. 衛生要求

應符合我國衛生福利主管機關之相關法令規定。

7. 檢驗

除總固醇、紅二醇及熊果醇依 ISO 12228-2:2014 之規定，豆甾二烯依 ISO 15788-1:1999 及 COI/T.20/Doc. no. 16/Rev. 1[2]之規定，蠟質依 AOCS Ch 8-02 (02)[3]之規定，UV 吸光值依 ISO 3656: 2011 之規定外，其餘品質要求依 CNS 3639 之規定。

8. 包裝及標示

本品之包材應符合我國衛生福利主管機關公布之〝食品器具容器包裝衛生標準〞規定；其瓶蓋及附貼或直接印於包裝上之標紙或標識應外觀良好，完整無損；其標示除依 CNS 3192 之規定外，另應符合我國衛生福利主管機關之規定。

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