

IFUS – Estimated Deliverable Supply – Softs Methodology

May 2019

ICE Futures U.S. agricultural contracts provide for several different physical delivery methods. In all cases, the delivery requirements for the futures contracts reflect common practices and locations for the underlying physical product. The Cocoa, Coffee “C”, Cotton No. 2 and FCOJ contracts call for delivery to take place at Exchange licensed warehouses via electronic warehouse receipts. Delivery for the Sugar No. 11 contract is free-on-board the receiver’s vessel at a port within the country of origin while delivery for the Sugar No. 16 contract occurs at U.S. refinery ports.

For the contracts providing for warehouse delivery, the quantity of certified Exchange stocks at any time reflects a subset of the deliverable supply for the futures contract. Supplies of the product exist at multiple locations that could be moved into Exchange warehouses and certified for delivery against the futures contract. The infrastructure and logistics required to move product so that it can be delivered against the futures contract exists for all the commodities underlying Exchange futures contract. Indeed, the Exchange grants short spot month exemptions for deliverable stocks that are not certified, but can be certified and delivered. Thus, meaningful estimates of deliverable supply need to take into account non-certified stocks that meet the quality standards of the futures contract and could potentially be delivered. However, non-certified stocks are only included in the estimates when the quantity that is of deliverable quality can reasonably be determined.

For the contracts providing for alternative methods of delivery, certified stocks data does not exist. The estimates have been calculated from available data that the Exchange believes best represents the supply available for delivery against the futures contract.

The deliverable supply estimates provided in Exhibit A are derived from the best data the Exchange has found and likely represent a subset of the entire deliverable supply for each contract. Exhibit A also contains the data used to calculate the estimates. It should be noted that in all cases, Exchange spot month position limits represent a small percentage of the estimated deliverable supply. To provide additional information that was considered, Exhibit B summarizes existing warehouse capacity to store certified stocks in accordance with Exchange rules and average grading costs.

Cocoa

The Cocoa futures contract calls for the physical delivery of 10 metric tons of Exchange-grade cocoa beans from a variety of African, Asian and Central and South American origins at Exchange licensed warehouses located in five U.S. delivery ports: Port of New York District, Delaware River Port District, Port of Hampton Roads, Port of Albany and Port of Baltimore. Delivery takes place via electronic warehouse receipts.

Exchange certified stocks are reported daily, along with the total quantity of cocoa stored in Exchange licensed warehouses. The quantity of cocoa certified stocks significantly understates the deliverable supply of cocoa, as the total quantity of cocoa stored in Exchange-licensed warehouses is much larger than certified stocks. Because a certificate of grade is good for only two delivery periods, uncertified cocoa held in licensed warehouses often is not certified until it is needed for delivery. Therefore, in its analysis the Exchange included in deliverable supply 85 percent of the stocks held in licensed warehouses, based on estimates from commercial market participants of the quantity meeting exchange delivery requirements.

In reaching this number, the Exchange also considered licensed warehouse capacity, that is, the maximum number of bags of cocoa that could be stored in Exchange warehouses in accordance with Exchange rules regarding the storage and configuration of Exchange lots. This data is contained in Exhibit B and clearly shows that as of December 24, 2018, total capacity of all licensed stores for certified stocks far exceeded total stocks (certified and uncertified) as of that date. Accordingly, no reduction of deliverable supply was warranted.

The Exchange also considered cocoa under long-term contracts or agreements that could not be delivered against the futures contract and should not be counted in deliverable supply estimates. Because there is no readily available data on cocoa under long-term contracts, the Exchange has consulted with commercial market participants who are active in both the physical and futures markets, including deliveries, to estimate the quantity of cocoa under long-term contracts or agreements that could not be delivered against the futures contract and should not be counted in deliverable supply estimates. Feedback from these firms indicates generally zero (0) to 15 percent of cocoa in Exchange facilities may be under long-term agreement and might not be deliverable, with the higher percentage estimated to be applicable during limited time frames. Given this feedback, the Exchange has reduced its estimate of deliverable supply by 10 percent.

Taking all the factors discussed above into account, estimated deliverable supply over the 2015-2017 period averaged 19,558 futures contract equivalents. The lowest deliverable supply for a futures contract delivery month was found in December (average 15,600 contract equivalents) and the highest deliverable supply was in May (average 23,071 contract equivalents).

Coffee

The Coffee "C" futures contract calls for the physical delivery of 37,500 pounds of Exchange-grade Arabica green coffee beans from one of 20 countries of origin at Exchange licensed warehouses located in one of several ports in the U.S. and Europe: Port of New York District, Port of Virginia, Port of New Orleans, Port of Houston, Port of Miami, Port of Bremen/Hamburg, Port of Antwerp and Port of Barcelona. Delivery takes place via electronic warehouse receipts.

Exchange certified stocks are reported daily, but may not reflect all the deliverable supply available on that date as there may be additional coffee available that meets Exchange delivery requirements that has not been certified. Deliverable supply for coffee is based solely on Exchange certified stock data because the Exchange has found no source to determine the quantity of additional stocks that are futures contract delivery quality.¹ The data for the 2015-2017 period does not display any noticeable seasonality. In developing its estimate of deliverable supply, the Exchange also considered coffee under long-term contracts or agreements that could not be delivered against the futures contract and should not be counted in deliverable supply estimates. Because there is no readily available data on coffee under long-term contracts, the Exchange has consulted with commercial market participants who are active in both the physical and futures markets, including deliveries, to estimate the quantity of coffee under long-term contracts or agreements that could not be delivered against the futures contract and should not be counted in deliverable supply estimates. Feedback from these firms indicates generally zero (0) to 5 percent of coffee in Exchange facilities may be under long-term agreement and could not be delivered, with the higher percentage estimated to be in effect during limited time frames. Given this feedback, the Exchange does not believe coffee stocks which may be under long-term agreements significantly impact deliverable supply and has not adjusted the estimate.

The Exchange also considered warehouse capacity for certified stocks, the time provided by Exchange rules to certify coffee for delivery, the costs of grading and the history of stocks becoming certified during notice and delivery periods, and determined that our deliverable supply estimates did not need to be adjusted for any of these factors.

Taking all of the factors discussed above into account, estimated deliverable supply over the 2015-2017 period averaged 6,719 futures contract equivalents.

Cotton No. 2

The Cotton No. 2 futures contract calls for the physical delivery of 50,000 pounds net weight of U.S. origin Upland growth cotton of certain minimum standards of basis grade and staple length. Delivery takes place via electronic warehouse receipts issued by Exchange licensed warehouses located in five designated delivery points: Galveston, Texas; Greenville/Spartanburg, South Carolina; Houston, Texas; Memphis, Tennessee and Dallas/Ft. Worth, Texas.

Exchange certified stocks are reported daily, but do not reflect all the deliverable supply available on that date because there is additional cotton that meets Exchange delivery requirements that has not been certified. To obtain a more complete estimate, the Exchange has collected the data contained in the USDA's Weekly Bales Made Available to Ship (BMAS)

¹ Analysis of the data shows that certified stocks are more than sufficient to support the current Exchange spot month position limit.

Summary report in order to estimate the deliverable stocks contained in or near Exchange warehouses, both certified and non-certified, during notice and delivery periods for the futures contract. The inventory data in the BMAS report was reduced by 3 percent to estimate the quantity of Upland cotton, consistent with production data. The data was then multiplied by the percentage of bales that were tenderable in each crop year, i.e. meet the delivery requirements of the Cotton No. 2 contract. This percentage was found in monthly data published by the USDA of the number of bales it classed each month and the percentage of those bales that are tenderable. The resulting quantities were multiplied by an estimate of the percentage of the inventories reported in the BMAS report already located in Exchange warehouses (14 percent), based on the total capacity reported in the BMAS report and the Exchange capacity found in Exhibit B. Finally, the estimated inventories in Exchange warehouses were compared to Exchange certified stocks for the same date. The higher of the two numbers was used to estimate deliverable supply.

In performing its analysis, the Exchange also considered cotton under long-term contracts or agreements that could not be delivered against the futures contract and should not be counted in deliverable supply estimates. Because there is no readily available data on cotton under long-term contracts, the Exchange consulted with commercial market participants who are active in both the physical and futures markets, including deliveries, to estimate the quantity of cotton that is under long-term contracts or agreements that could not be delivered against the futures contract and therefore should not be counted in deliverable supply estimates. Feedback from these firms indicates that generally the cotton data used by the Exchange to estimate deliverable supply does not include any supplies that could not be delivered against the futures contract due to long-term contracts.

The Exchange also considered seasonal differences and their impact on stocks, in particular that stocks tend to be lowest in the fall, which is consistent with the activity seen in the October futures contract month. This contract month is characterized by volume, open interest and deliveries that are significantly lower than the other futures contract months. Despite this predictable circumstance, the Exchange does not believe that delivery problems have occurred with October contract expirations over the decades that the current Federal spot month limit of 300 contracts has been in place.

Taking all of the factors discussed above into account, estimated deliverable supply over the October 2015-July 2018 period averaged 6,948 futures contract equivalents.

FCOJ

The FCOJ-A futures contract calls for the physical delivery of 15,000 pounds of U.S. Grade A orange juice solids from the U.S., Brazil, Costa Rica and Mexico at Exchange licensed warehouses in Florida, New Jersey and Delaware. Delivery takes place via electronic warehouse receipts.

Exchange certified stocks are reported daily, but do not reflect all the deliverable supply available on that date because there is additional FCOJ that meets Exchange requirements that has not been certified. To estimate deliverable supply, the Exchange collected FCOJ bulk inventory data published weekly by the Florida Department of Citrus (“FDOC”) and consulted with commercial market participants to arrive at an estimate of the percentage of inventory in Florida that is futures contract delivery quality. This percentage was estimated to be 75 percent of the inventories reported by the FDOC.

According to commercial market participants, it only takes a few days to get product certified; even FCOJ arriving by ship takes less than a week from arrival to be unloaded, sampled and certified. It was also noted that FCOJ moves between facilities in Florida on a regular basis and that it was appropriate to consider the stocks reported by the FDOC as deliverable supply for the FCOJ contract, subject to haircuts for quality and the quantity that might be committed to long-term contracts or agreements. According to commercial market participants the stocks data reported by the FDOC includes all Exchange facilities in the state plus facilities owned by one additional entity. It is not possible to determine how much of the reported stocks are located in Exchange facilities.

Because there is no readily available data on FCOJ under long-term contracts or agreements that could not be delivered against the futures contract and should not be counted in deliverable supply estimates, the Exchange consulted with commercial market participants who are active in both the physical and futures markets, including deliveries, to calculate an estimate. Feedback from these firms indicates generally 5 to 40 percent of FCOJ in Exchange facilities may be under long-term agreement and might not be deliverable. Given this feedback, the Exchange estimated deliverable supply by reducing FDOC inventories by 30 percent to reflect supplies under long-term contracts and then calculated deliverable supply to be 75 percent of the remaining inventories to reflect Exchange quality supplies.

The Exchange also considered warehouse capacity for certified stocks, the time provided by Exchange rules to certify FCOJ for delivery, the costs of grading and our experience with expirations, including the addition of certified stocks during notice and delivery periods, and determined that our deliverable supply estimates did not need to be adjusted for any of these factors.²

Taking all the factors discussed above into account, estimated deliverable supply over the 2015-2017 period averaged 8,538 futures contract equivalents. The lowest deliverable supply was found in the fourth quarter of each year (average 7,377 contract equivalents per month) and the

² It should be noted that there are also inventories (and Exchange warehouses) that meet delivery specifications outside of Florida that have not been included in the deliverable supply estimate because there is no publicly available data. However, the Exchange has been provided with an estimate of an average of 3,500 contract equivalents per month that could be available in these locations.

highest deliverable supply was in the second quarter (average 9,522 contract equivalents per month).

Sugar No. 11

The Sugar No. 11 futures contract calls for the physical delivery of 112,000 pounds of raw cane sugar, free-on-board the receiver's vessel at a port within the country of origin of the sugar. There are 29 deliverable growths of sugar and the contract's delivery period is 2.5 months.

The methodology used to calculate deliverable supply for the Sugar No. 11 contract was employed in connection with the last spot month position limit increase for sugar, in 2001. Deliverable supply has been defined to equal the quantity of sugar delivered against the futures contract month plus one-half the contract quantity involved in Exchange for Physicals (EFPs) transacted in the expiring contract during the last month the contract trades. For example, for the October 2017 contract, which had a last trading day of September 29, 2017, half of the volume from EFPs transacted in the October 2017 contract during the month of September 2017 was added to the quantity delivered under the October 2017 contract. Using this methodology, estimated deliverable supply over the 2015-2017 period averaged 102,848 futures contracts. The lowest deliverable supply was found in March (average 84,466 contracts) and the highest deliverable supply was in October (average 121,266 contracts).

Sugar No. 16

The Sugar No. 16 futures contract calls for the physical delivery of 112,000 pounds of U.S. grown (or foreign origin with duty paid by the deliverer) raw cane sugar at one of five U.S. refinery ports as selected by the receiver. The sugar is delivered to a vessel berthed at a customary refiner's berth in New York, Baltimore, Galveston, New Orleans and Savannah.

To estimate deliverable supply, the Exchange consulted with commercial market participants and determined to base the estimate on monthly data published in the USDA's Sweetener Market Data report which defines supply as raw cane sugar inventories plus raw cane sugar production plus raw cane sugar imports. The Exchange also considered raw cane sugar under long-term contracts or agreements that could not be delivered against the futures contract and should not be counted in deliverable supply estimates as well as sugar located in locations where it generally would not be economic to deliver. Because there is no readily available data on sugar under long-term contracts, the Exchange has consulted with commercial market participants who are active in both the physical and futures markets, including deliveries, to estimate the quantity which may be under long-term contracts or agreements that might not be delivered against the futures contract and sugar located in regions that make it uneconomic to deliver and which should not be counted in deliverable supply estimates. Feedback from these firms indicates generally 30 percent of the raw cane sugar supply reported by the USDA is

under long-term agreement or is in uneconomic locations and might not be deliverable. Given this feedback, the Exchange has reduced the raw cane sugar supply reported by the USDA by 30 percent.

Taking all the factors discussed above into account, deliverable supply over the 2015-2017 period averaged 25,561 futures contract equivalents. The lowest deliverable supply was found in September (average 13,652 contract equivalents) and the highest deliverable supply was in March (average 32,871 contract equivalents).

Exhibit A

<u>Contract</u>	<u>Deliverable Supply</u>	<u>Deliverable Supply</u> <u>in Contract Units</u>	<u>Deliverable Supply</u> <u>Time Frame</u>	<u>Brief Description Deliverable Supply</u>	<u>Exchange</u> <u>Limit</u>
Cocoa	3,011,932 bags	19,558	2015-2017	Stocks in Exchange licensed warehouses	1,000
Coffee "C"	1,679,827 bags	6,719	2015-2017	Certified Exchange stocks	500
Cotton No. 2	694,849 bales	6,948	2016-2018	Estimated tenderable stocks in Exchange warehouses	300
FCOJ	128,070,000 pounds	8,538	2015-2017	Certified Exchange stocks and Florida inventories	300
Sugar No. 11	11,518,976,000 pounds	102,848	2015-2017	Exchange Deliveries and EFPs	5,000
Sugar No. 16	2,862,832,000 pounds	25,561	2015-2017	U.S. Raw Cane Sugar Supply	1,000

COCOA

**HISTORICAL END OF MONTH COCOA STOCKS BY PORT
HELD BY ICE FUTURES U.S. LICENSED WAREHOUSES - total bags**

	<u>Bags</u>	<u>Contract Units</u>	<u>10 percent haircut</u>	<u>Est. deliverable quality</u>
January 31,2015	2,939,129	19,085	17,177	14,600
February 27 2015	3,241,140	21,046	18,942	16,100
March 31 2015	3,310,717	21,498	19,348	16,446
April 30 2015	3,978,625	25,835	23,252	19,764
May 29, 2015	4,085,184	26,527	23,874	20,293
June 30, 2015	4,546,712	29,524	26,572	22,586
July 31, 2015	4,369,872	28,376	25,538	21,707
August 31, 2015	4,117,823	26,739	24,065	20,455
September 30, 2015	3,867,487	25,114	22,602	19,212
October 30, 2015	3,578,681	23,238	20,914	17,777
November 30, 2015	3,438,264	22,326	20,094	17,080
December 31 2015	3,255,321	21,138	19,025	16,171
January 29, 2016	3,481,367	22,606	20,346	17,294
February 29,2016	3,828,631	24,861	22,375	19,019
March 31, 2016	4,383,984	28,467	25,621	21,778
April 29, 2016	4,208,988	27,331	24,598	20,908
May 31 2016	4,019,506	26,101	23,491	19,967
June 30, 2016	3,755,388	24,386	21,947	18,655
July 29, 2016	3,465,718	22,505	20,254	17,216
August 31, 2016	3,230,701	20,979	18,881	16,049
September 30, 2016	2,930,252	19,028	17,125	14,556
October 31,2016	2,846,693	18,485	16,637	14,141
November 30,2016	2,740,689	17,797	16,017	13,614
December 30,2016	2,779,362	18,048	16,243	13,807
January 31,2017	3,309,268	21,489	19,340	16,439
February 28,2017	4,023,359	26,126	23,513	19,986
March 31, 2017	4,814,390	31,262	28,136	23,916
April 28, 2017	5,515,906	35,818	32,236	27,400
May 31, 2017	5,828,524	37,848	34,063	28,953
June 30, 2017	5,654,598	36,718	33,046	28,089
July 31, 2017	5,369,541	34,867	31,380	26,673
August 31, 2017	5,009,618	32,530	29,277	24,885
September 29, 2017	4,617,949	29,987	26,988	22,940
October 31,20217	4,096,900	26,603	23,943	20,351
November 30, 2017	3,714,400	24,119	21,708	18,451
December 29, 2017	3,386,661	21,991	19,792	16,823
Average	3,937,260	25,567	23,010	19,558

Source: <https://www.theice.com/FuturesUSReportCenter.shtml>

COFFEE

**HISTORICAL END OF MONTH CERTIFIED COFFEE 'C' STOCKS BY PORT
HELD BY ICE FUTURES U.S. LICENSED WAREHOUSES - total bags**

	<u>Bags</u>	Contract <u>Units</u>
January 31,2015	2,268,568	9,074
February 27 2015	2,271,307	9,085
March 31 2015	2,306,469	9,226
April 30 2015	2,245,533	8,982
May 29, 2015	2,139,361	8,557
June 30, 2015	2,150,108	8,600
July 31, 2015	2,102,960	8,412
August 31, 2015	2,086,948	8,348
September 30, 2015	1,990,781	7,963
October 30, 2015	1,900,040	7,600
November 30, 2015	1,835,936	7,344
December 31 2015	1,727,703	6,911
January 29, 2016	1,607,584	6,430
February 29,2016	1,546,141	6,185
March 31, 2016	1,430,806	5,723
April 29, 2016	1,382,136	5,529
May 31 2016	1,312,599	5,250
June 30, 2016	1,305,756	5,223
July 29, 2016	1,289,540	5,158
August 31, 2016	1,282,594	5,130
September 30, 2016	1,258,353	5,033
October 31,2016	1,274,978	5,100
November 30,2016	1,257,383	5,030
December 30,2016	1,245,379	4,982
January 31,2017	1,297,522	5,190
February 28,2017	1,330,969	5,324
March 31, 2017	1,359,597	5,438
April 28, 2017	1,408,158	5,633
May 31, 2017	1,474,778	5,899
June 30, 2017	1,515,282	6,061
July 31, 2017	1,548,439	6,194
August 31, 2017	1,707,898	6,832
September 29, 2017	1,805,686	7,223
October 31,20217	1,911,740	7,647
November 30, 2017	1,921,079	7,684
December 29, 2017	1,973,669	7,895
Average	1,679,827	6,719

Source: <https://www.theice.com/FuturesUSReportCenter.shtml>

COTTON

Total Inventory from BMAS database (contract units)

	2015-16	2016-17	2017-18	Average
October	25,712	27,483	25,447	26,214
December	94,795	102,414	112,240	103,150
March	91,715	97,995	117,160	102,290
May	65,105	60,817	78,390	68,104
July	41,764	30,858	42,990	38,538
Average	63,818	63,914	75,245	67,659

Total Inventory Adjusted for Upland (contract units)

	2015-16	2016-17	2017-18	Average
October	24,940	26,659	24,684	25,428
December	91,951	99,341	108,873	100,055
March	88,964	95,055	113,645	99,221
May	63,152	58,992	76,038	66,061
July	40,511	29,933	41,701	37,381
Average	61,904	61,996	72,988	65,629

Total Inventory Adjusted for Upland & Tenderable Quality (contract units)

	2015-16	2016-17	2017-18	Average
October	14,216	19,194	17,032	16,814
December	52,412	71,526	75,122	66,353
March	50,709	68,440	78,415	65,855
May	35,997	42,474	52,466	43,646
July	23,091	21,551	28,773	24,472
Average	35,285	44,637	50,362	43,428

Total Inventory Adjusted for Upland, Tenderable, & ICE-licensed Warehouses (contract units)

	2015-16	2016-17	2017-18	Average
October	2,275	3,071	2,725	2,690
December	8,386	11,444	12,020	10,617
March	8,114	10,950	12,546	10,537
May	5,759	6,796	8,395	6,983
July	3,695	3,448	4,604	3,916
Average	5,646	7,142	8,058	6,948

Greater of ICE Certificated Stocks or Total Inventory Adjusted for Upland, Tenderable & ICE Warehouses (contract units)

	2015-16	2016-17	2017-18	Average
October	2,275	3,071	2,725	2,690
December	8,386	11,444	12,020	10,617
March	8,114	10,950	12,546	10,537
May	5,759	6,796	8,395	6,983
July	3,695	3,448	4,604	3,916
Average	5,646	7,142	8,058	6,948

Source: United States Department of Agriculture, Farm Service Agency, Weekly BMAS Summary Report
<http://www.fsa.usda.gov/programs-and-services/commodity-operations/program-area-links/index#Cott>

Source: tenderable cotton

<http://www.ams.usda.gov/market-news/cotton>

<http://search.ams.usda.gov/mnsearch/mnsearch.aspx>

FCOJ

	Bulk Inventory <u>Million PS</u>	Contract <u>Units</u>	30% <u>haircut</u>	estimated deliverable <u>quality</u>
Jan-15	281	18,711	13,097	9,823
Feb-15	280	18,657	13,060	9,795
Mar-15	284	18,921	13,245	9,934
Apr-15	314	20,920	14,644	10,983
May-16	336	22,409	15,687	11,765
Jun-15	369	24,604	17,223	12,917
Jul-15	354	23,588	16,512	12,384
Aug-15	332	22,155	15,509	11,632
Sep-15	305	20,334	14,234	10,675
Oct-15	281	18,763	13,134	9,851
Nov-15	264	17,601	12,320	9,240
Dec-15	239	15,904	11,133	8,350
Jan-16	249	16,598	11,619	8,714
Feb-16	239	15,956	11,169	8,377
Mar-16	244	16,267	11,387	8,540
Apr-16	259	17,236	12,065	9,049
May-16	280	18,683	13,078	9,808
Jun-16	282	18,805	13,163	9,872
Jul-16	270	18,017	12,612	9,459
Aug-16	254	16,909	11,836	8,877
Sep-16	232	15,446	10,812	8,109
Oct-16	212	14,149	9,905	7,428
Nov-16	195	12,968	9,078	6,808
Dec-16	174	11,629	8,140	6,105
Jan-17	189	12,571	8,800	6,600
Feb-17	176	11,749	8,225	6,168
Mar-17	179	11,949	8,364	6,273
Apr-17	187	12,441	8,709	6,532
May-17	205	13,667	9,567	7,175
Jun-17	217	14,477	10,134	7,600
Jul-17	207	13,825	9,677	7,258
Aug-17	189	12,601	8,820	6,615
Sep-17	172	11,467	8,027	6,020
Oct-17	183	12,203	8,542	6,406
Nov-17	176	11,725	8,207	6,155
Dec-17	173	11,525	8,067	6,050
Average	244	16,262	11,383	8,538

Source: <http://fdogrower.com/economics/economic-research/processor-reports/>

SUGAR 11

<u>Futures Contract Month</u>	<u>EFPs/AAs During Last Trading Month</u>	<u>Delivery</u>	<u>Est. Deliverable Supply</u>
Mar-15	125,724	19,998	82,860
May-15	139,458	37,611	107,340
Jul-15	189,079	9,073	103,613
Oct-15	223,169	23,644	135,229
Mar-16	131,240	11,791	77,411
May-16	114,445	8,309	65,532
Jul-16	186,977	23,706	117,195
Oct-16	195,816	15,215	113,123
Mar-17	138,925	23,665	93,128
May-17	119,450	29,947	89,672
Jul-17	203,745	31,755	133,628
Oct-17	188,695	21,098	115,446
Average	163,060	21,318	102,848

Source: ICE Futures U.S. data--stated in contract units

SUGAR 16

U.S. Raw Cane Sugar Supply

	<u>Supply</u> <u>(Short tons)</u>	<u>Contract</u> <u>Units</u>	<u>Adjusted</u> <u>for Location</u> <u>and L-T contracts</u>
Jan-15	2,759,225	49,272	34,490
Feb-15	2,794,140	49,895	34,927
Mar-15	2,889,819	51,604	36,123
Apr-15	2,687,142	47,985	33,589
May-15	2,373,333	42,381	29,667
Jun-15	2,045,077	36,519	25,563
Jul-15	1,712,822	30,586	21,410
Aug-15	1,465,705	26,173	18,321
Sep-15	1,156,400	20,650	14,455
Oct-15	1,479,279	26,416	18,491
Nov-15	1,936,028	34,572	24,200
Dec-15	2,202,183	39,325	27,527
Jan-16	2,151,868	38,426	26,898
Feb-16	2,184,486	39,009	27,306
Mar-16	2,326,828	41,551	29,085
Apr-16	2,370,584	42,332	29,632
May-16	2,230,642	39,833	27,883
Jun-16	1,962,386	35,043	24,530
Jul-16	1,584,614	28,297	19,808
Aug-16	1,316,616	23,511	16,458
Sep-16	988,625	17,654	12,358
Oct-16	1,443,646	25,779	18,046
Nov-16	1,985,280	35,451	24,816
Dec-16	2,411,152	43,056	30,139
Jan-17	2,641,938	47,177	33,024
Feb-17	2,632,128	47,002	32,902
Mar-17	2,672,428	47,722	33,405
Apr-17	2,467,089	44,055	30,839
May-17	2,304,496	41,152	28,806
Jun-17	2,032,203	36,289	25,403
Jul-17	1,631,800	29,139	20,398
Aug-17	1,288,337	23,006	16,104
Sep-17	1,131,419	20,204	14,143
Oct-17	1,574,405	28,114	19,680
Nov-17	2,160,087	38,573	27,001
Dec-17	2,621,943	46,820	32,774
Average	2,044,893	36,516	25,561

Source: USDA Sweetener Market Data Table 1A

Exhibit B

Exchange Warehouse Capacity
(stated in futures contract equivalents)

Cocoa	36,890
Coffee	42,790
Cotton No. 2	32,250
FCOJ	30,160

Grading Costs
(average per contract)

Cocoa	\$125
Coffee	\$313
Cotton No. 2	\$675
FCOJ	\$200