USA Grass and Legume Seed Data: 2016/2017 Exports

Overview:

For the first time in over 5 years, American exports of grass and legume seed rose from the previous year. 2016-17 saw USA exports at 384 million lbs., above the previous year's 5 year low of 357 million lbs., but still 50 million lbs. below the nearby 5 year average for exports (434 million lbs.). This 7.1% increase in exports (up 27 million lbs.) was lead once again by the "big 3" crops, namely annual ryegrass, tall fescue and perennial ryegrass. In total, 7 species saw exports of over 10 million lbs., while two other categories of mixed seed (forage seeds, grass seed – other) also had exports exceeding 10 million lbs.

USA Exports of Grass and Legume Seed by Species											
(by crop year, millions of \$, millions of lbs.)											
	2013-14	2013-14	2014-15	2014-15	2015-16	2015-16	2016-17	2016-17			
Product	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity			
World Total	350.6	364.1	365.3	352.3	334.8	320.7	346.5	360.2			
Ryegrass, annual	46.0	115.4	45.1	112.3	41.9	102.6	45.7	109.2			
Fescue, tall	35.5	45.5	28.3	35.8	26.5	33.4	41.8	51.7			
Ryegrass, perennial	32.9	36.9	28.6	32.2	27.3	34.0	34.0	46.0			
Forage Seeds	11.3	22.9	11.0	21.3	12.5	21.4	15.5	30.7			
Alfalfa, cert	73.7	22.3	102.7	30.9	105.1	32.6	77.3	25.4			
Bluegrass, Kentucky	30.5	21.5	27.3	18.6	23.6	15.4	41.6	24.8			
Grass seed, other	43.8	36.6	43.3	40.1	32.0	26.1	16.4	16.0			
Sudangrass	5.2	14.8	5.6	12.9	6.1	15.3	5.3	14.5			
Alfalfa, uncert	20.9	12.7	18.9	11.7	13.6	5.4	19.8	7.7			
Clover, other red	1.8	1.4	3.9	3.0	4.1	3.2	7.4	5.8			
Fescue, other	3.0	3.0	3.5	3.8	5.4	5.8	4.3	4.8			
Bentgrass	8.6	2.4	6.1	1.6	7.0	1.8	13.2	3.9			
Orchardgrass	2.3	2.2	3.3	3.5	3.3	3.9	3.3	3.7			
Bermudagrass, other	7.1	5.4	6.9	5.4	6.9	4.9	4.7	3.5			
Legume, other	1.3	2.8	0.5	1.1	0.8	1.6	1.6	3.4			
Fescue, Creeping Red	9.5	10.8	6.6	8.1	4.2	4.9	2.3	2.7			
Clover - white/Ladino	2.0	1.0	2.8	1.3	1.6	1.0	3.3	2.0			
Bermudagrass. husked	11.2	3.6	16.9	5.1	7.4	2.4	5.6	1.9			
Clover, Crimson	2.0	1.5	1.8	1.8	3.3	3.5	1.3	1.2			
Clover, other	0.7	0.5	0.6	0.4	1.3	0.8	1.4	0.9			
Wheatgrass	0.9	0.6	0.4	0.2	0.3	0.2	0.4	0.2			
Clover, dblct red	0.1	0.1	0.8	0.7	0.6	0.7	0.2	0.1			
Fescue, Meadow	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1			
Birdsfoot Trefoil	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.0			
World Total	350.6	364.1	365.3	352.3	334.8	320.7	346.5	360.2			

Of the 6 species showing over 10 million lbs. in exports, certified alfalfa seed was the only legume seed to reach this level. However, another 7.7 million lbs. of common alfalfa was also exported. Note: 2 export categories, "forage seeds" and Grass Seed, other" refer to seed mixtures and therefore do not identify one specific species.

2016-17 USA trade data shows large swings in yearly exports for many species. Perennial ryegrass, tall fescue, Kentucky bluegrass, alfalfa (common), red clover, bentgrass, and white clover/ladino seed exports all saw their year to year exports increase by over 25%. However, other species showed just as dramatic decreases in year to year export comparisons, with alfalfa (certified), creeping red fescue, and crimson clover fall by 28%, 80% and 193% respectively. The warm season grass, bermudagrass, saw both of its export categories (husked and other) fall by 21% and 40%.

Exports by Species:

Liports by Opecies.	SA Evn	arte of	Alfalfa (Seed h	v Cour	itry			
	SA Exports of 2013-14		2014		201		2016-17		
	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	
World Total (cert.)	73.7	22.3	102.7	30.9	105.1	32.6	77.3	25.4	
Mexico	16.8	6.4	17.8	7.0	22.6	8.6	22.0	9.0	
Saudi Arabia	30.0	7.2	58.7	15.5	53.8	13.3	31.2	8.1	
Canada	4.6	1.6	7.1	2.3	9.5	4.0	7.6	2.6	
Italy(*)	0.4	0.1	1.0	0.3	1.1	0.6	1.8	0.7	
Peru	0.5	0.2	0.5	0.2	2.6	0.9	1.6	0.6	
Sudan(*)	3.4	1.0	0.9	0.2	2.5	0.5	2.5	0.5	
United Arab Emirates	0.0	0.0	0.3	0.1	0.0	0.0	1.4	0.5	
Argentina	5.9	1.6	5.9	1.5	3.4	0.9	1.7	0.5	
Total other Countries (20)	12.0	4.1	10.6	3.7	9.6	3.6	7.5	2.9	
World Total (uncert.)	20.9	12.7	18.9	11.7	13.6	5.4	19.8	7.7	
Mexico	4.5	3.3	5.5	3.9	4.9	2.2	5.8	2.8	
Saudi Arabia	0.8	0.3	4.3	2.4	3.0	1.0	3.6	1.1	
Argentina	0.2	0.2	0.2	0.1	0.2	0.1	3.3	1.0	
Total other Countries (36)	15.3	8.8	9.0	5.2	5.5	2.1	7.0	2.7	
USA Ex	ports o	f Annu	al Ryeg	grass S	eed, by	Count	ry		
World Total	46.0	115.4	45.1	112.3	41.9	102.6	45.7	109.2	
China	12.3	31.2	11.6	30.5	10.9	26.7	11.8	27.9	
Korea, South	6.2	18.3	6.6	19.8	5.0	14.9	7.6	21.7	
Australia(*)	3.0	6.6	5.4	12.9	6.5	16.1	7.4	17.3	
Japan	4.4	14.6	3.3	7.1	2.5	4.7	3.5	7.2	
Italy(*)	4.7	9.6	2.4	4.9	3.9	8.7	2.8	6.1	
Canada	2.7	6.3	2.5	7.1	2.7	7.4	2.4	6.0	
Spain	2.5	5.4	3.0	6.4	1.6	3.8	1.7	3.8	
Mexico	1.0	2.5	1.0	2.9	1.3	3.6	1.5	4.0	
Portugal	0.8	1.8	1.5	2.8	0.7	1.5	1.4	2.7	
South Africa	0.8	1.9	0.6	1.2	0.8	1.7	0.9	1.8	
India	0.5	1.6	0.0	0.0	0.4	1.0	0.8	1.4	
Colombia	0.8	1.7	0.7	1.3	1.2	2.6	0.7	2.1	
Ecuador	0.9	2.5	0.4	0.8	0.5	1.3	0.6	1.3	
United Kingdom	-	-	0.1	0.1	0.1	0.1	0.4	1.3	
Argentina	1.4	3.1	1.0	2.5	0.5	1.2	0.4	1.0	
Total other Countries (16)	3.9	8.3	5.0	11.9	3.1	7.1	1.7	3.7	
USA	Export	s of Ta	II Fesci	ue Seed	d, by Co	ountry			
USA World Total	Export 35.5	s of Ta 45.5	II Fesci 28.3	ue Seed 35.8	d, by Co 26.5	ountry 33.4	41.8	51.7	
USA World Total China	35.5 17.5	s of Ta 45.5 21.5	II Fescu 28.3 12.8	35.8 15.5	26.5 12.1	33.4 14.8	41.8 24.8	51.7 30.5	
USA World Total China Korea, South	35.5 17.5 2.5	s of Ta 45.5 21.5 4.3	11 Fescu 28.3 12.8 2.1	35.8 15.5 3.7	26.5 12.1 1.9	33.4 14.8 3.0	41.8 24.8 2.9	51.7 30.5 4.8	
USA World Total China Korea, South Argentina	35.5 17.5 2.5 1.2	s of Ta 45.5 21.5 4.3 1.5	28.3 12.8 2.1 1.0	35.8 15.5 3.7 1.3	26.5 12.1 1.9 2.2	33.4 14.8 3.0 2.8	41.8 24.8 2.9 2.3	51.7 30.5 4.8 2.5	
USA World Total China Korea, South Argentina Canada	35.5 17.5 2.5 1.2 2.0	s of Ta 45.5 21.5 4.3 1.5 2.8	28.3 12.8 2.1 1.0 1.8	35.8 15.5 3.7 1.3 2.3	26.5 12.1 1.9 2.2 2.0	33.4 14.8 3.0 2.8 2.6	41.8 24.8 2.9 2.3 2.1	51.7 30.5 4.8 2.5 2.8	
World Total China Korea, South Argentina Canada Italy(*)	35.5 17.5 2.5 1.2 2.0 1.7	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1	28.3 12.8 2.1 1.0 1.8 1.5	35.8 15.5 3.7 1.3 2.3	26.5 12.1 1.9 2.2 2.0	33.4 14.8 3.0 2.8 2.6 1.8	41.8 24.8 2.9 2.3 2.1 1.8	51.7 30.5 4.8 2.5 2.8 2.0	
World Total China Korea, South Argentina Canada Italy(*) Spain	2.5 1.2 2.0 1.7 1.4	45.5 21.5 4.3 1.5 2.8 2.1	28.3 12.8 2.1 1.0 1.8 1.5	35.8 15.5 3.7 1.3 2.3 1.7	26.5 12.1 1.9 2.2 2.0 1.3 0.6	33.4 14.8 3.0 2.8 2.6 1.8 0.7	41.8 24.8 2.9 2.3 2.1 1.8 1.6	51.7 30.5 4.8 2.5 2.8 2.0	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile	35.5 17.5 2.5 1.2 2.0 1.7 1.4	45.5 21.5 4.3 1.5 2.8 2.1 1.6	28.3 12.8 2.1 1.0 1.8 1.5 1.0	35.8 15.5 3.7 1.3 2.3 1.7 1.1	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6	33.4 14.8 3.0 2.8 2.6 1.8 0.7	41.8 24.8 2.9 2.3 2.1 1.8 1.6	51.7 30.5 4.8 2.5 2.8 2.0 1.8	
USA World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*)	2.5 1.2 2.0 1.7 1.4 0.6	45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7	28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6	35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36)	35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5	11 Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 0.6	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9	51.7 30.5 4.8 2.5 2.8 2.0 1.8	
USA World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuck	28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2	
USA World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuce	II Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 Y Cou	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 ntry 41.6	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2	
USA World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9	11 Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4	1e Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cou	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 ntry 41.6 18.1	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2	11 Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9	1e Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 2 Coul 15.4 3.2 9.3	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 ntry 41.6 18.1 12.8	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5	II Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9	10 Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 1177 41.6 18.1 12.8 2.0	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5	II Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5	10 Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3 1.1	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 1177 41.6 18.1 12.8 2.0 1.4	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan Denmark(*)	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5	45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1	11 Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5	10 Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3 1.1 0.3	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 11.8 2.0 1.4 1.3	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*)	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1 0.3 0.1	11 Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1	10 Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1 0.2	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 2 Courses 15.4 3.2 9.3 1.1 0.3 0.2	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 11.8 2.0 1.4 1.3 1.1	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1 0.3 0.1	II Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1	18.6 18.6 19.6	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 2 Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 112.8 2.0 1.4 1.3 1.1	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21)	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1 0.3 0.1 0.2 1.2	II Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1	18.6 19.6	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 2 Course 15.4 3.2 9.3 1.1 0.3 0.2 0.2	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 ntry 41.6 18.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21)	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of	8 of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1 0.3 0.1 0.2 1.2 Perent	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 0.4 1.8	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 1.2 0.3 0.1 0.2 0.2 1.2 egrass	26.5 12.1 1.9 2.2 2.0 1.3 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 2.0 0.5 0.4 0.3 0.6 1.7 Seed, b	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.9 y Cour	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 11.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.6 0.5 2.1	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) USA Exp	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9	36.9	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 0.4 1.8	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 1.2 0.3 0.1 0.2 1.2 egrass 32.2	26.5 12.1 1.9 2.2 2.0 1.3 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.3 0.9 y Cour 34.0	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 1.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.6 0.5 2.1	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) USA Exp	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9 12.3	**S of Ta** 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuce 21.5 6.9 11.2 1.5 0.1 0.3 0.1 0.2 1.2 Perent 36.9 13.8	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 0.4 1.8 1.8	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1 0.2 0.2 1.2 egrass 32.2 13.9	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 2 Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.3 0.9 2 Cour 34.0 9.8	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 1.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 1.1 1.0 8.6	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.6 0.5 2.1	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) USA Exp	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9 12.3 7.3	36.9 1.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 0.4 1.8 1.8 1.8	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1 0.2 1.2 egrass 32.2 13.9 5.4	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b 27.3 7.7 5.5	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.3 0.9 y Cour 34.0 9.8 5.9	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 ntry 41.6 18.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 ntry 34.0 8.6 7.9	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.6 0.5 2.1	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) USA Exp World Total China Canada Netherlands Japan Countries (21) USA Exp	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9 12.3 7.3 0.4	**S of Ta** 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuce 21.5 6.9 11.2 1.5 0.1 0.3 0.1 0.2 1.2 Perent 36.9 13.8 7.3 0.4	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 0.4 0.4 1.8 11.6 5.5	10 Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1 0.2 0.2 1.2 egrass 32.2 13.9 5.4 0.4	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b 27.3 7.7 5.5	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 2 Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.3 0.9 2 Cour 34.0 9.8 5.9 5.8	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 117 41.6 18.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 1try 34.0 8.6 7.9 5.9	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.6 0.5 2.1 46.0 13.0 9.8 9.0	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) USA Exp World Total Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) USA Exp World Total Canada China Korea, South Spain	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9 12.3 7.3 0.4 1.2	**S of Ta** 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 **Kentuce** 21.5 0.1 0.3 0.1 0.2 1.2 **Perent** 36.9 13.8 7.3 0.4 1.4	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 0.4 0.4 1.8 11.8 1.8 0.4	10 Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1 0.2 0.2 1.2 egrass 32.2 13.9 5.4 0.4 1.2	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b 27.3 7.7 5.5 4.0 1.3	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 2.6 1.8 0.7 0.5 1.2 5.9 2.6 0.3 0.9 2.6 0.3 0.9 2.6 0.3 0.9 2.6 0.3 0.9 2.6 0.3 0.9 2.6 0.3 0.9 2.6 0.3 0.9 2.6 0.3 0.9 2.6 0.3 0.9 2.7 0.3 0.9 2.8 0.9 2.8 0.9 2.9 0.9 2.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 ntry 41.6 18.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 ntry 34.0 8.6 7.9 5.9 1.6	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.6 0.5 2.1 46.0 13.0 9.8 9.0 2.3	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) World Total Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) World Total Canada Canada Netherlands Canada Netherlands Canada Netherlands Canada Canada Netherlands Canada Canada Canada Cone Canada Co	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9 12.3 7.3 0.4 1.2 1.6	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1 0.3 0.1 0.2 1.2 Perent 36.9 13.8 7.3 0.4 1.4 2.0	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 0.4 28.6 11.6 5.5 0.4 1.1 1.3	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 1.2 0.3 0.1 0.2 1.2 egrass 32.2 13.9 5.4 0.4 1.2 1.2	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b 27.3 7.7 5.5 4.0 1.3 2.1	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 2.6 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.3 0.9 2.6 15.4 15.4 15.4 15.4 15.4 15.4 15.4 15.4	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 ntry 41.6 18.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 ntry 34.0 8.6 7.9 5.9 1.6 1.6	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.6 0.5 2.1 46.0 13.0 9.8 9.0 2.3 1.6	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) World Total Canada China Canada Netherlands Canada Netherlands Canada Netherlands Japan Denmark(*) Korea, South Total other Countries (21) World Total Canada China Korea, South Spain Japan Netherlands	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9 12.3 7.3 0.4 1.2 1.6 2.1	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1 0.3 0.1 0.2 1.2 Perent 36.9 13.8 7.3 0.4 1.4 2.0 2.3	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 1.8 0.4 1.9 1.8 0.5 0.1 1.8 0.4 0.4 1.8	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1 0.2 1.2 egrass 32.2 1.2 egrass 1.2 egra	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b 27.3 7.7 5.5 4.0 1.3 2.1 0.2	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.3 0.9 y Cour 34.0 9.8 5.9 5.8 1.9 2.3 0.2	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 1.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 1.7 34.0 8.6 7.9 5.9 1.6 1.6 1.2	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.5 2.1 46.0 13.0 9.8 9.0 2.3 1.6 1.8	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36)	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9 12.3 7.3 0.4 1.2 1.6 2.1 0.8	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1 0.3 0.1 0.2 1.2 Perent 36.9 13.8 7.3 0.4 1.4 2.0 2.3 0.8	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 1.8 0.4 1.9 1.8 0.5 0.1 1.8 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1 0.2 0.2 1.2 egrass 32.2 13.9 5.4 0.4 1.2 0.7 0.8	1, by Co 26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b 27.3 7.7 5.5 4.0 1.3 2.1 0.2 0.7	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.3 0.9 y Cour 34.0 9.8 5.9 5.8 1.9 2.3 0.2 0.7	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 1.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 1.7 34.0 8.6 7.9 5.9 1.6 1.6 1.2 0.9	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.6 0.5 2.1 46.0 13.0 9.8 9.0 2.3 1.6 1.8	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) USA Exp World Total Canada China Korea, South Spain Japan Netherlands Italy(*) Ecuador	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9 12.3 7.3 0.4 1.2 1.6 2.1 0.8 0.9	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1 0.3 0.1 0.2 1.2 Perent 36.9 13.8 7.3 0.4 1.4 2.0 2.3 0.8 1.4	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 0.4 1.8 0.5 0.1 0.4 1.8 0.5	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1 0.2 1.2 13.9 5.4 0.4 1.2 0.7 0.8 1.2	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b 27.3 7.7 5.5 4.0 1.3 2.1 0.2 0.7	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.3 0.9 y Cour 34.0 9.8 5.9 5.8 1.9 2.3 0.2 0.7 0.9	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 1.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 1try 34.0 8.6 8.6 1.6 1.6 1.2 0.9 0.8	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.5 2.1 46.0 13.0 9.8 9.0 2.3 1.6 1.8	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36)	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9 12.3 7.3 0.4 1.2 1.6 2.1 0.8 0.9 6.3	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1 0.3 0.1 0.2 Perent 36.9 13.8 7.3 0.4 1.4 2.0 2.3 0.8 1.4 7.4	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 0.4 0.4 11.9 1.8 0.5 0.1 0.4 0.4 0.4 0.4 0.4 0.6 0.6 0.6 0.6 0.6 0.6 7.0 27.3 10.4 11.9 0.5 0.1 0.5 0.1 0.5 0.1 0.5 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1 0.2 0.2 1.2 egrass 32.2 13.9 5.4 0.4 1.2 0.7 0.8	1, by Co 26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b 27.3 7.7 5.5 4.0 1.3 2.1 0.2 0.7	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.3 0.9 y Cour 34.0 9.8 5.9 5.8 1.9 2.3 0.2 0.7	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 1.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 1.7 34.0 8.6 7.9 5.9 1.6 1.6 1.2 0.9	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.6 0.5 2.1 46.0 13.0 9.8 9.0 2.3 1.6 1.8	
World Total China Korea, South Argentina Canada Italy(*) Spain Chile France(*) Total other Countries (36) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) USA Exp World Total China Canada Netherlands Japan Denmark(*) Germany(*) Korea, South Total other Countries (21) USA Exp World Total Canada China Korea, South Spain Japan Netherlands Italy(*) Ecuador	Export 35.5 17.5 2.5 1.2 2.0 1.7 1.4 0.6 1.2 7.4 orts of 30.5 11.7 13.4 2.3 0.2 0.5 0.2 0.4 1.9 orts of 32.9 12.3 7.3 0.4 1.2 1.6 2.1 0.8 0.9 6.3 antity = m	s of Ta 45.5 21.5 4.3 1.5 2.8 2.1 1.6 0.7 1.4 9.5 Kentuc 21.5 6.9 11.2 1.5 0.1 0.3 0.1 0.2 Perent 36.9 13.8 7.3 0.4 1.4 2.0 2.3 0.8 1.4 7.4	Il Fesci 28.3 12.8 2.1 1.0 1.8 1.5 1.0 0.6 7.0 27.3 10.4 11.9 1.8 0.5 0.1 0.4 0.4 11.9 1.8 0.5 0.1 0.4 0.4 0.4 0.4 0.4 0.6 0.6 0.6 0.6 0.6 0.6 7.0 27.3 10.4 11.9 0.5 0.1 0.5 0.1 0.5 0.1 0.5 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	Je Seed 35.8 15.5 3.7 1.3 2.3 1.7 1.1 0.7 0.7 8.7 egrass 18.6 5.8 9.6 1.2 0.3 0.1 0.2 1.2 13.9 5.4 0.4 1.2 0.7 0.8 1.2	26.5 12.1 1.9 2.2 2.0 1.3 0.6 0.6 1.0 4.8 Seed, b 23.6 6.0 12.0 0.5 0.4 0.3 0.6 1.7 Seed, b 27.3 7.7 5.5 4.0 1.3 2.1 0.2 0.7	33.4 14.8 3.0 2.8 2.6 1.8 0.7 0.5 1.2 5.9 y Cour 15.4 3.2 9.3 1.1 0.3 0.2 0.2 0.3 0.9 y Cour 34.0 9.8 5.9 5.8 1.9 2.3 0.2 0.7 0.9	41.8 24.8 2.9 2.3 2.1 1.8 1.6 1.0 0.9 4.4 1.1 12.8 2.0 1.4 1.3 1.1 1.0 3.9 1try 34.0 8.6 8.6 1.6 1.6 1.2 0.9 0.8	51.7 30.5 4.8 2.5 2.8 2.0 1.8 1.1 1.0 5.2 24.8 10.1 9.1 1.0 0.8 0.6 0.5 2.1 46.0 13.0 9.8 9.0 2.3 1.6 1.8	

Annual Ryegrass:

- Is by far the USA's largest grass/legume seed export crop, with 109 million lbs. exported in 2016/17. This figure represents 28% of total American grass and legume seed exports this past year. Tall fescue seed exports come in a distant 2nd with exports at 51.7 million lbs.
- Exports increased by 7 million lbs. from previous year
- Total value of annual ryegrass seed exports = \$45.7 million
- China is the number one destination for annual ryegrass seed, with 27.9 million lbs. of imports
- 14 other countries imported over 1 million lbs. of American annual ryegrass seed, with South Korea (21.7 million lbs.), Australia (17.3 million lbs.) and Japan (7.2 million lbs.) holding the next 3 import positions.
- While Chinese imports of annual ryegrass seed rose by 1.2 million lbs., South Korean imports increased by 6.8 million lbs (45%) from 2015/16.
- In total, 31 countries imported annual ryegrass seed from the USA in 2016-17.

Tall Fescue

- 2016/17 saw tall fescue exports at 51.7 million lbs. (13.4% of total USA grass/legume seed exports). The 51.7 million lbs. represents an increase of 18.4 million lbs. from the previous year, and 13 million lbs. above the previous 3 year average.
- Total value of exports = \$41.8 million
- China dominates USA tall fescue exports, taking 30.5 million lbs. (59% of total tall fescue exports). Chinese
 exports increased two-fold, as China only imported 14.8 million lbs. the previous year. The value of tall fescue
 sales to China totalled \$24.8 million.
- South Korea was the USA's 2nd main tall fescue buyer, taking in 4.8 million lbs. in 2016/17.
- 6 other countries imported over 1 million lbs. of American tall fescue, with total countries buying at 36.

Perennial Ryegrass

- The USA's 3rd largest export crop was once again perennial ryegrass, with exports for 2016/17 @ 45.9 million lbs, a 12 million lb. Increase from the previous year.
- The top 3 importers of American perennial ryegrass seed (Canada: 13 million lbs., China; 9.8 million lbs., and South Korea; 9 million lbs) accounted for 69% of exports.
- 6 other countries imported over 1 million lbs. of American perennial ryegrass seed.
- 38 other countries imported perennial ryegrass from the USA.

Alfalfa Seed

- 2016/17 saw 25.4 million lbs. of certified alfalfa seed, and another 7.7 million lbs. of common seed exported throughout the world (total = 33.1 million lbs.). However, this total is 5 million lbs. less than the previous year, when exports saw 32.6 million lbs. of certified and 5.37 million lbs. of common alfalfa seed exported (total 2015/16 = 38 million lbs.). Of note, certified alfalfa seed fell by 7.2 million lbs., while common seed exports rose by 2.3 million lbs.
- Mexico and Saudi Arabia remain the USA's main buyers for certified alfalfa seed, with Mexico buying 9 million lbs., with Saudi Arabia purchasing another 8 million lbs. These two countries accounted for over 67% of American certified alfalfa seed exports.
- Canada, with 2.6 million lbs. of certified alfalfa seed imports, was the only other country showing imports greater than 1 million lbs.
- 27 countries purchased certified alfalfa seed from the USA in 2016/17.
- In addition to certified alfalfa seed, Mexico (2.8 million lbs.) and Saudi Arabia (1 million lbs.) led all countries in purchases of American uncertified alfalfa seed. Argentina (1 million lbs.) was the only other country buying over a million lbs of American common alfalfa seed.

- 26 other countries also purchased common alfalfa seed in 2016/17.
- The total value of certified seed exports came in at \$77 million, with common alfalfa seed adding another \$19.8 million to the USA economy.

Kentucky Bluegrass

- 2016/17 Kentucky bluegrass seed exports rose 38%, resulting in 24.8 million lbs. of exports.
- China and Canada dominated exports, with China buying 10.1 million lbs., while Canada bought another 9.1 million lbs. These two countries accounted for over 77% of exports.
- Another 27 countries purchased Kentucky bluegrass seed, with only the Netherlands buying more than 1 million lbs.
- The value of American Kentucky bluegrass sales to the world jumped to \$41.6 million, (from 2015/16's \$23.6 million)

Red Clover

- 2016/17 saw American red clover exports increase over 44%, resulting in 5.76 million lbs. exported. (Worth \$7.4 million).
- With the exception of crimson clover, other clover species also showed an increase in exports, with white clover/ladino exports increasing by 49% (1.97 million lbs.) and "other clovers" category up 9.3% (930,000 lbs.).Crimson clover exports though fell by over 193%, with less than 1.2 million lbs. exported.
- 11 countries, led by Canada's 3.8 million lbs., imported red clover from the USA last year.

Creeping Red Fescue

- Of interest to many Canadian growers, 2016/17 saw exports of "creeper" fall dramatically (down 80%), with only 2.7 million lbs. of exports, well below the previous 5 year average of 9.5 million lbs. Exports have now fallen for 4 consecutive years, as 2012/13 exports were over 12.5 million lbs.! The 2012/13 "creeper" export crop brought \$10.2 million into the USA economy, while last years' exports were valued at \$2.3 million.
- Canada remains the USA's number one destination for creeping red fescue, although Canadian imports have followed this pattern of decreasing imports. 2016/17 saw 15 other countries importing American creeping red fescue.

Mixed Species

- USA trade statistics identifies 3 categories for mixed seed, those being "forage seed", "grass seed, other" and
 "other legume".
- By "value-adding", these 3 mixes totaled over 50 million lbs. in exports, led by "forage seeds" with 30.7 million lbs. in exports. (Up over 9 million lbs. from 2016/17).
- "grass Seed, other" fell by 10 million lbs., while "other seed, legumes", increased its' exports by 52%, showing 3.4 million lbs. in exports.
- 2016/17 saw these mixtures add over \$33 million into the USA economy.

Exports by Country

2016-17 data shows the USA exporting grass and legume seed to 63 countries around the world. Of these 63 countries, 8 imported over 10 million lbs. of seed (with Spain only 65,000 lbs. under this mark). These 8 countries accounted for 70% of total American grass and legume seed exports.

USA Grass and Legume Seed Exports by Country, Crop Year										
millions of \$, millions of lbs.										
	20′	13-14	201	14-15	201	5-16	2016-17			
Country	Value	Quantity	Value Quantity \		Value Quantity		Value	Quantity		
Total	350.6	364.1	365.3	352.3	334.8	320.7	346.5	360.2		
China	82.2	86.8	76.5	82.1	56.4	64.0	81.6	89.5		
Canada	55.7	62.8	55.5	61.0	60.1	65.5	56.4	66.1		
Korea, South	16.7	29.7	17.0	31.7	16.5	28.8	23.2	43.3		
Mexico	28.7	22.9	29.8	23.0	33.9	23.5	34.9	27.0		
Australia	7.3	10.7	9.6	16.5	9.6	19.0	10.8	20.1		
Japan	14.0	25.7	14.3	16.1	14.7	14.6	14.8	17.7		
Italy	15.7	22.3	10.5	13.4	12.7	17.0	11.5	14.0		
Saudi Arabia	32.7	12.3	65.7	22.3	61.2	23.6	35.7	11.5		
Spain	9.2	11.6	8.4	11.5	5.1	7.8	7.1	9.9		
Argentina	9.4	6.9	9.0	6.4	7.0	5.6	8.7	5.8		
Netherlands	12.5	10.9	9.5	10.6	8.1	6.0	6.9	5.8		
Rest of World	66.3	61.5	59.6	57.6	49.4	45.5	55.1	49.4		
Total	350.6	364.1	365.3	352.3	334.8	320.7	346.5	360.2		
2016/17 Rest of World = 51 countries (> 100,000 lbs. in imports)										

China

- Imported over 89.5 million lbs.of American grass and legume seed in 2016/17, led by 30.5 million lbs of tall fescue, followed by 27.9 million lbs. of annual ryegrass and 10.1 million lbs. of Kentucky Bluegrass.
- 4 other "categories" showed over a million lbs. of imports, those being perennial ryegrass (9.8 million lbs.), "grass seed, other" (3.5), bentgrass (2.5) and bermudagrass, husked (1.4).
- Total value of Chinese grass and legume seed purchases in 2016/17 were at \$81.6 million.
- Total exports to China were up by 25.5 million lbs., a 40% increase from 2015/16! Last years' exports to China had fallen by 19 million lbs.
- Tall fescue imports by China rose by 15.7 million lbs (over 100% increase), while annual ryegrass and perennial ryegrass seed imports increased by 1.2 and 3.9 million lbs. respectively.
- Alfalfa seed imports, both certified and common, were at .5 million lbs. combined, a far cry from the 2000's, when alfalfa led the American breakthrough into the Chinese grass and legume seed markets.

Canada

- Canadian buying of American grass and legume seed continues to by consistant, making her the number 2 importing country of American seed. 2016/17saw Canada import 66.1 million lbs. of seed, just slightly above the previous 3 year average of 63 million lbs.
- Canadian imports were led by 21.3 million lbs. of "forage seeds" (mixtures) and 13 million lbs. of perennial ryegrass. Kentucky bluegrass seed totaled 9.1 million lbs.
- 7 other species/mixtures saw their imports at levels over 1 million lbs.
- Canadian imports were valued at \$56.4 million.

South Korea

- With over 43.3 million lbs. of imports, South Korea continues to rank and the USA's 3 biggest grass/legume seed buyer.
- Imports are led by the ryegrasses, with annual at 21.7 and perennial at 9 million lbs. Although South Korea imported over 1 million lbs.of 5 other species/mixtures. These two species made uip over 70% of South Korean imports.
- South Korean imports of USA grass/legume seed brought \$23.2 back to the American economy.

Mexico

- Mexico's imports of 9 million lbs. of certified alfalfa seed represented 33% of total grass/legume seed imports from the USA (27 million lbs.) for 2016/17. Another 2.8 million lbs. of common alfalfa seed was also imported.
- In addition to alfalfa 4.4 million lbs. of sudangrass, 4 million lbs. of annual ryegrass and 3.6 million lbs. of "forage seeds".
- Mexico purchased \$34.9 million worth of seed in 2016/17.

USA Exports of Alfalfa Seed, by Country							USA Exports of Tall Fescue Seed, by Country										
	2013	-14	2014	1-15	2018	5-16	2016	5-17		201	3-14	2014	-15	201	5-16	2016	5-17
	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity		Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity
World Total (cert.)	73.7	22.3	102.7	30.9	105.1	32.6	77.3	25.4	World Total	35.5	45.5	28.3	35.8	26.5	33.4	41.8	51.7
Mexico	16.8	6.4	17.8	7.0	22.6	8.6	22.0	9.0	China	17.5	21.5	12.8	15.5	12.1	14.8	24.8	30.5
Saudi Arabia	30.0	7.2	58.7	15.5	53.8	13.3	31.2	8.1	Korea, South	2.5	4.3	2.1	3.7	1.9	3.0	2.9	4.8
Canada	4.6	1.6	7.1	2.3	9.5	4.0	7.6	2.6	Argentina	1.2	1.5	1.0	1.3	2.2	2.8	2.3	2.5
Italy(*)	0.4	0.1	1.0	0.3	1.1	0.6	1.8	0.7	Canada	2.0	2.8	1.8	2.3	2.0	2.6	2.1	2.8
Peru	0.5	0.2	0.5	0.2	2.6	0.9	1.6	0.6	Italy(*)	1.7	2.1	1.5	1.7	1.3	1.8	1.8	2.0
Sudan(*)	3.4	1.0	0.9	0.2	2.5	0.5	2.5	0.5	Spain	1.4	1.6	1.0	1.1	0.6	0.7	1.6	1.8
United Arab Emirates	0.0	0.0	0.3	0.1	0.0	0.0	1.4	0.5	Chile	0.6	0.7	0.6	0.7	0.6	0.5	1.0	1.1
Argentina	5.9	1.6	5.9	1.5	3.4	0.9	1.7	0.5	France(*)	1.2	1.4	0.6	0.7	1.0	1.2	0.9	1.0
Total other Countries (20)	12.0	4.1	10.6	3.7	9.6	3.6	7.5	2.9	Total other Countries (36)	7.4	9.5	7.0	8.7	4.8	5.9	4.4	5.2
World Total (uncert.)	20.9	12.7	18.9	11.7	13.6	5.4	19.8	7.7	USA E	xports	of Peren	nial Rye	egrass S	Seed, by	Countr	у	
Mexico	4.5	3.3	5.5	3.9	4.9	2.2	5.8	2.8	World Total	32.9	36.9	28.6	32.2	27.3	34.0	34.0	46.0
Saudi Arabia	0.8	0.3	4.3	2.4	3.0	1.0	3.6	1.1	Canada	12.3	13.8	11.6	13.9	7.7	9.8	8.6	13.0
Argentina	0.2	0.2	0.2	0.1	0.2	0.1	3.3	1.0	China	7.3	7.3	5.5	5.4	5.5	5.9	7.9	9.8
Total other Countries (36)	15.3	8.8	9.0	5.2	5.5	2.1	7.0	2.7	Korea, South	0.4	0.4	0.4	0.4	4.0	5.8	5.9	9.0
USA Ex	ports o	f Annu	al Rvec	rass S	eed, by	Count	۲V		Spain	1.2	1.4	1.1	1.2	1.3	1.9	1.6	2.3
World Total	46.0	115.4	45.1	112.3	41.9	102.6	45.7	109.2	Japan	1.6	2.0	1.3	1.2	2.1	2.3	1.6	1.6
China	12.3	31.2	11.6	30.5	10.9	26.7	11.8	27.9	Netherlands	2.1	2.3	0.5	0.7	0.2	0.2	1.2	1.8
Korea, South	6.2	18.3	6.6	19.8	5.0	14.9	7.6	21.7	Italy(*)	0.8	0.8	0.8	0.8	0.7	0.7	0.9	1.0
Australia(*)	3.0	6.6	5.4	12.9	6.5	16.1	7.4	17.3	Ecuador	0.9	1.4	0.9	1.2	0.7	0.9	0.8	1.0
Japan	4.4	14.6	3.3	7.1	2.5	4.7	3.5	7.2	Total other Countries (30)	6.3	7.4	6.6	7.5	5.1	6.3	5.3	6.5
Italy(*)	4.7	9.6	2.4	4.9	3.9	8.7	2.8	6.1	Value = millions of \$, qua	ntity = mill	ions of lbs						
Canada	2.7	6.3	2.5	7.1	2.7	7.4	2.4	6.0	Total other countries = 2016/1	7							
Spain	2.5	5.4	3.0	6.4	1.6	3.8	1.7	3.8									
Mexico	1.0	2.5	1.0	2.9	1.3	3.6	1.5	4.0		NO.	Oper Control	Ardic Ocean		Archic Ocean for Spendent			
Total other Countries (23)	3.9	8.3	5.0	11.9	3.1	7.1	1.7	3.7		Canada		THE THE	Russia				
USA Exp	orts of	Kentuc	ky Blue	egrass	Seed, b	y Cour	ntry			United States of America	No.			Mayo			
World Total	30.5	21.5	27.3	18.6	23.6	15.4	41.6	24.8	North Pach Core	of America	Oos Oos	Market Market M		Chira	Nor Pact Oce		
China	11.7	6.9	10.4	5.8	6.0	3.2	18.1	10.1	Tangan NIC Mani	100	The state of the s	Name of the later	to have	Y	-		
Canada	13.4	11.2	11.9	9.6	12.0	9.3	12.8	9.1		timedian E	Chron Pro-	Secretary Co.	Open Street	many The Many		-	
Netherlands	2.3	1.5	1.8	1.2	2.0	1.1	2.0	1.0			Area Brazil	tog	Jee Marcal				
Japan	0.2	0.1	0.5	0.3	0.5	0.3	1.4	0.8	Proct. Alternative		Stopa	Name of the last	Total Season	Indian Ocean	Australia		
Denmark(*)	0.5	0.3	0.1	0.1	0.4	0.2	1.3	0.6		South Pacific Ocean	-	South Affantic Ocean		1	77 3	1	
Germany(*)	0.2	0.1	0.4	0.2	0.3	0.2	1.1	0.6			1-E			S.D.	19		
Korea, South	0.4	0.2	0.4	0.2	0.6	0.3	1.0	0.5	'		To.	Antaro	1/2	1			
Total other Countries (21)	1.9	1.2	1.8	1.2	1.7	0.9	3.9	2.1		163	1. 185	Antaro	gr gr gr	y y S			

Australia

- Australian purchases of American grass/legume seed last year centered around annual ryegrass (17.3 million lbs.) accounting for 86% of her total grass/legume seed imports from the USA (20.1 million lbs.).
- Total grass/legume seed imported amounted to \$10.8 million, with annual ryegrass seed accounting for \$7.4 million.

Japan

- Japanese buyers purchased 17.7 million lbs. of American grass/legume seed in 2016/17, with annual ryegrass (7.2 million lbs.) and "grass seed, other" (2.5 mil. lbs.) leading the way.
- In total, Japan purchased \$14.8 million worth of seed from the USA last year.

Italy

- With 14 million lbs. of imports, Italy ranked 7th in most popular destination for USA grass/legume seed exports.
- Annual ryegrass (6.1 million lbs.) tall fescue (2.0 million lbs.) and sudangrass (1.7 million lbs.) led the import list of grass/legume seed
- Total imports were valued at \$11.5 million

Saudi Arabia

- The only other country to import more than 10 million lbs. of American grass/legume seed,
- Saudi Arabia's imports (11.5 million lbs.) centered on alfalfa seed, with certified alfalfa imports hitting over 8.1 million lbs. And with another 1.1 million lbs. of common alfalfa imported, alfalfa seed accounted for over 80% of all Saudi grass/legume seed imports.
- Saudi purchases of the much higher priced alfalfa seed resulted in \$35.7 million, which would place the value of her purchases #4 in American grass/legume seed exports if one looked strictly at value.

Summary

As the worlds' leader in grass and legume seed production, what happens in the USA affects all other grass and legume seed crops throughout the world. What other countries buy (and don't buy) from the USA will influences prices and subsequent future production.



The USA will continue to be the world leader in production of grass and legume seed, and as such, will be watched closely by the world when it comes to marketing and trade in this agricultural sector. American export trade in the grass/legume seed sector sets the tone.

Note: due to conversions, some numbers may be slightly off. Trade data does not account for secondary processing and possible re-exporting to other countries after original seed amounts have been imported into a particular country, nor does the data account for possible incorrect entries by exporting companies. Trade data obtained from Foreign Agriculture Service (FAS), USDA.

Prepared by:

David Wong BSc Ag., B.Ed., CACE Beaverlodge Ab Sept 14, 2017