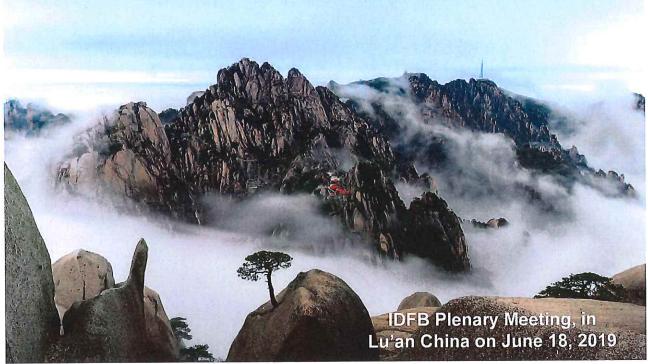
Report of Down and Feathers Market in Japan 2019

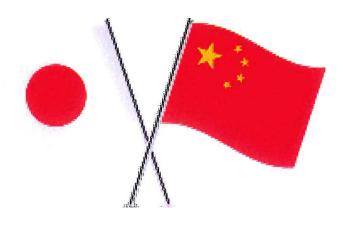


JDFA Japan Down Products Corporative Association Presented by Mr. Masao Yamamoto

The Economy in Japan from 2018 to 2019

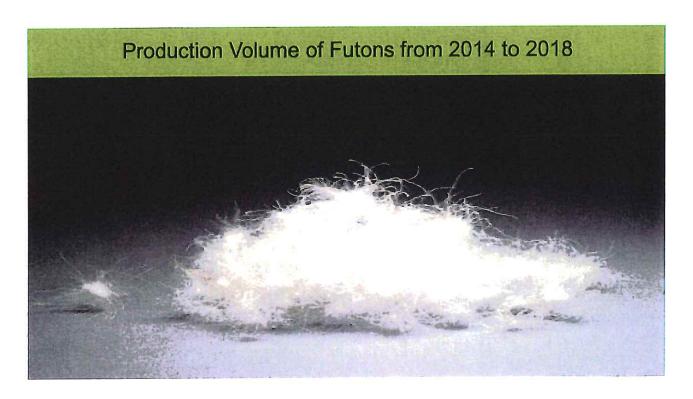
In 2018, the growth rates in Europe and oil producing countries decreased, because the world economy was impacted by trade war triggered by the Trump administration and slowdown of the Chinese economy. IMF, has also revised its World Economic Outlook for 2019, revising the global growth forecast downward to 3.5%. In the second half of 2019, there is concern that the world economy will fall into recession, depending on how the prolonged trade negotiations between China and the United States and the Brixit issue develop.

Part 1 Latest Situation of Down Quilt Market in Japan



JDFA JUNE 2019

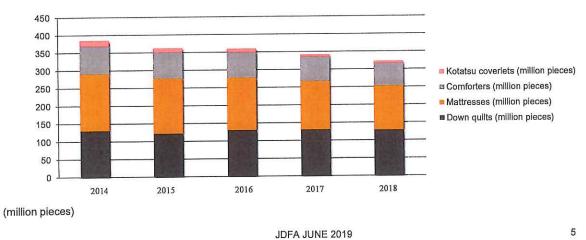
3



The production volume of down quilts in 2018 was 1.3 million sheets, a slight 0.6% year-on-year decrease.

Production Volume of Futons from 2014 to 2018

Year	Down quilts (million pieces)	Mattresses (million pieces)	Comforters (million pieces)	Kotatsu coverlets (million pieces)	Total (million pieces)
2014	130	160	79	16	385
2015	122	155	75	11	363
2016	130	148	72	10	360
2017	130	136	70	6	342
2018	129	124	64	6	323



Import of Raw Down Materials from 2016 to 2018

In 2018, the volume of raw down materials imported from China and Taiwan stood at 1,878 tons, accounting for 65% of the total import volume of raw down materials.



Import of Raw Down Materials from 2016 to 2018 in Japan

Quantity(Piece)			CIF Amount (Thousand JPY)			CIF Ave. Unit Price (JPY/Kg)			
Country	2016	2017	2018	2016	2017	2018	2016	2017	2018
China	1,226,379	1,039,052	786,638	4,018,776	4,896,243	4,618,811	3,277	4,712	5,872
Гаіwaп	1,063,339	1,032,412	1,091,395	3,610,730	4,259,753	5,308,863	3,396	4,126	4,864
Poland	144,224	260,921	221,272	1,627,851	2,368,509	2,357,643	11,287	9,077	10,655
France	430,176	247,761	180,683	1,738,351	1,236,682	1,124,952	4,041	4,991	6,226
Hungary	345,832	242,044	196,123	1,897,333	1,737,982	1,584,449	5,486	7,180	8,079
Burgarla	66,620	85,486	96,828	273,585	423,695	636,896	4,107	4,956	6,578
Canada	50,886	56,380	12,180	261,302	315,133	78,141	5,135	5,589	6,416
Ukraine	31,655	43,901	113,131	274,891	453,508	890,608	8,684	10,330	7,872
Russia	37,473	39,897	54,167	356,402	372,277	609,095	9,511	9,331	11,245
Spain	24,591	33,737	47,009	111,868	179,637	297,400	4,549	5,325	6,326
Germany	27,216	19,871	26,086	141,504	138,315	192,674	5,199	6,961	7,386
Vietnam	113,240	12,080	45,740	332,769	27,751	230,257	2,739	2,297	5,03
Iceland	2,116	1,195	1,081	436,950	264,742	232,998	206,498	221,541	215,53
Others	49,817	17,830	23,801	231,385	100,217	184,021	4,644	5,620	7,73
TOTAL	3,613,564	3,132,567	2,896,134	15,313,697	16,774,444	18,346,808	4,238	5,355	6,33

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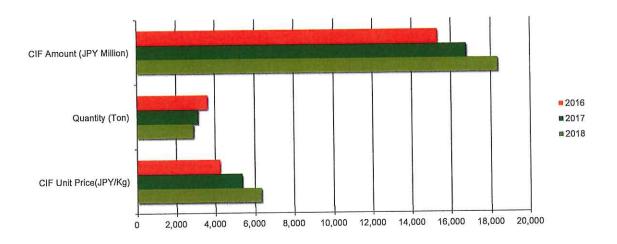
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Import of Row Down Materials from 2016 to 2018 in Japan

In 2018, the import volume of raw down materials stood at 2,896 tons, a large year-on-year decrease (7.5%).



Import of Raw Down Materials from 2016 to 2018 in Japan



	CIF Unit Price(JPY/Kg)	Quantity (Ton)	CIF Amount (JPY Million)
2018	6,335	2,896	18,347
2017	5,355	3,132	16,774
2016	4,238	3,613	15,313

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Import of Down Quilts from 2016 to 2018 in Japan

Out of the total volume of down quilts imported in 2018, those imported from China and Vietnam stood at 2.9 million sheets, accounting for 99% of the total import volume.



Import of Down Quilts from 2016 to 2018 in Japan

STEEL STREET	Quantity (Piece)			CIF Amount (Thousand Yen)			CIF Ave. Unit Price (Yen/Piece)		
Country	2016	2017	2018	2016	2017	2018	2016	2017	2018
China	2,032,014	2,573,458	2,662,634	6,845,705	8,914,711	8,942,850	3,369	3,464	3,359
Vietnam	183,552	146,225	286,785	711,823	733,720	1,260,174	3,878	5,018	4,394
Germany	7,263	4,800	8,737	283,848	217,767	317,849	39,081	45,368	36,380
USA	3,160	3,951	7,043	17,673	26,359	55,770	5,593	6,671	7,919
Taiwan	10,498	3,092	1,227	18,284	6,004	22,021	1,742	1,942	17,947
Denmark	2,317	2,928	802	31,575	46,704	8,315	13,628	15,951	10,368
Poland	6	25	273	2,514	1,478	13,773	419,000	59,120	50,451
Switzerland	390	306	246	16,016	13,862	17,088	41,067	45,301	69,463
Finland	315	130	42	17,258	5,500	2,324	54,787	42,308	55,333
Austria	88	88	40	11,678	9,165	301	132,705	104,148	7,525
Others	219	1,918	387	12,870	20,555	5,039	58,767	10,717	13,020
TOTAL	2,239,822	2,736,921	2,968,216	7,969,244	9,995,825	10,645,504	3,558	3,652	3,586

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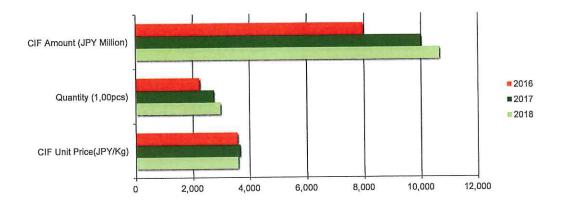
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Import of Down Quilts from 2016 to 2018 in Japan

In 2018, the import volume of down quilts increased by 0.2 million sheets from 2017 (an 8.5% increase).



Import of Down Quilts from 2016 to 2018 in Japan



	CIF Unit Price(JPY/Kg)	Quantity (1,00pcs)	CIF Amount (JPY Million)
2018	3,586	2,968	10,645
2017	3,652	2,736	9,995
2016	3,558	2,239	7,969

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Part 2 Major Initiatives Taken by JDFA Over the Last Year

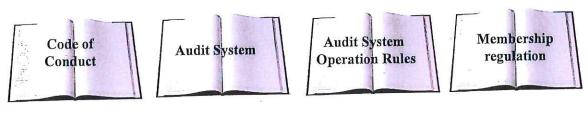


JDFA JUNE 2019

1) JBA Traceability Audit System (J-TAS)

1 JBA Traceability Audit System was put into operation.

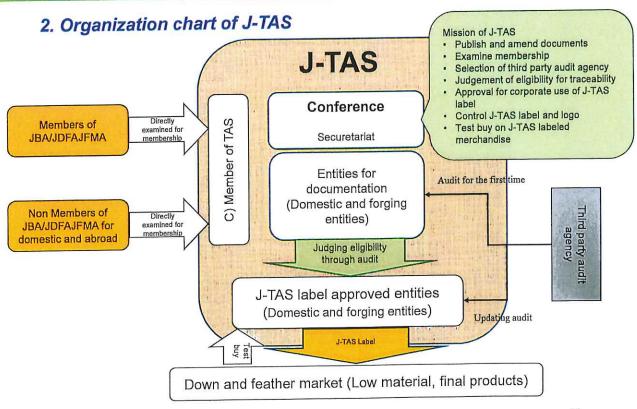
Effective 2019, the JBA Traceability Audit System (J-TAS) was put into operation as the final measures to counter origin deceptions. By virtue of guidance provided by the Ministry of Economy, Trade and Industry and for the purpose of disseminating this system, J-TAS committee was established within the Japan Bedding Goods Association "JBA".



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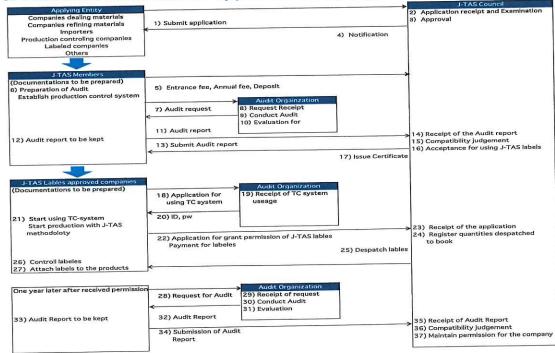
1) JBA Traceability Audit System (J-TAS)



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1) JBA Traceability Audit System (J-TAS)

3. Process to become an approved company



^{* 18), 19), 20)} meant for those needed to control documents for TC System

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2) Current problems in the quality of down products

1. The current environment

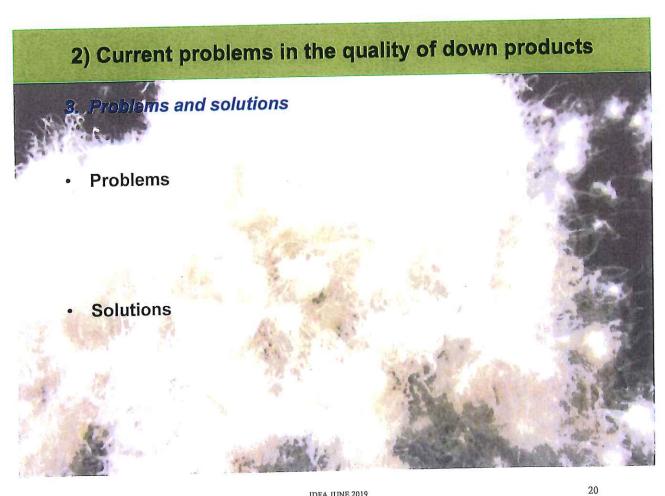
Down products are widely consumed by ordinary families. In recent years, down products using defective low-quality down and chemically-processed down are increasing, in order to reduce the costs of raw down materials.



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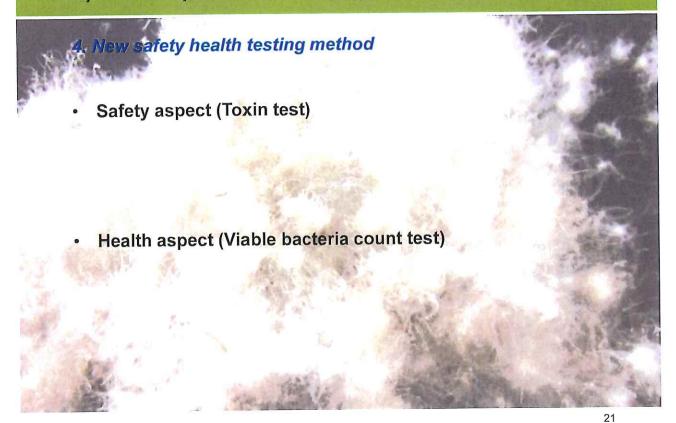
2) Current problems in the quality of down products Significant Challenges in Washed Down Materials Distribution of contaminated down (Pollution) Quality deception problem (Glue Down)

JDFA JUNE 2019



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2) Current problems in the quality of down products

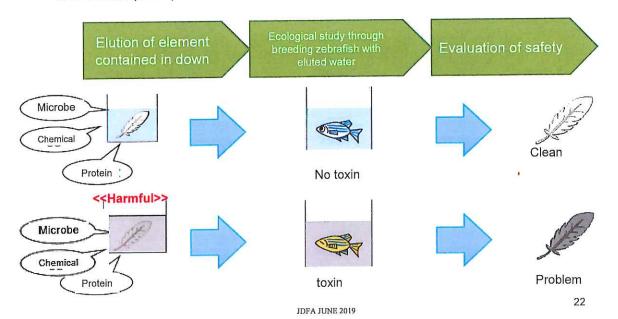


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2) Current problems in the quality of down products

5. Zebrafish Embryo Toxin Test

This down safety assessment technology was established on the basis of toxin assessment using zebrafish which was prepared in 2014 under the leadership of ECVAM (European Center for the Validation of Alternative Methods).



2) Current problems in the quality of down products

Summary of Zebrafish Embryo Toxin Testing

The results of recently-conducted Zebrafish Embryo Toxin Testing for down products revealed strong toxin on Glue Down and unwashed down. Furthermore, no toxin was found on washed down.



We confirmed that whether unwashed down materials have undergone appropriate washed process can be assessed by using zebrafish.

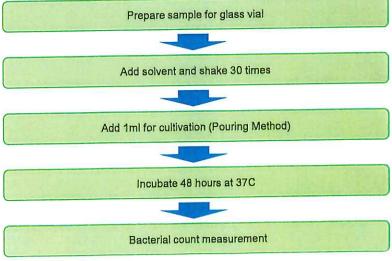
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2) Current problems in the quality of down products

6. Viable Bacteria Count Test

The count of viable bacteria means the count of mesophilic aerobic bacteria growing under testing conditions.

The testing method is as follows:



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2) Current problems in the quality of down products

7. Established the testing method for detecting fake down, such as Glue Down

Along with the Safety and Health Committee, the Technical Committee examined and recently published the "Testing Method for Detecting Fake Down, such as Glue Down." It is becoming even more difficult to detect Glue Down, because the method of deception is becoming more sophisticated every day. Accordingly, we are adding testing items to the testing method, as needed.

8. Revisions to the Gold Label standards based on revisions to JIS testing method for down and feather

The currently used JIS testing method based on pre treatment steam method cannot appropriately measure Down Power if Down like Glue Down are mixed.

Accordingly, we started examining Down Definition as well as the testing method of Fill Power(Down Power). Furthermore, along with this examination, we are planning to revise the Gold Label standards in near future.



Premium Gold Label

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3) Distribution of the New Stainless Steel Down Power Tester

Since 2010, when we started selling new equipment for measuring the down power of down products, we have sold the equipment to not only the members of JDFA but also raw materials manufacturers and testing institutions around the world.





5 units
10 units
27 units
7 units
7 units
2 units
1 unit
60 units
119 units

26

4) The 40th Anniversary of Establishment of the Association

We held a ceremony of the 40th anniversary of establishment of JDFA on October 10, 2018(October 10 is the Futon's (Japanese Quilt's) Day).



Thank you for your kind attention

