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Report of Original Project in Japan

Japan Down Products Corporative Association By Junya Kuroyanagi, Ph.D.



1) JIS Revision Status

2)"Definition" and "Standard Label" of Recycled Down and Feathers

1) JIS Revision Status

Background

In recent years, the quality of down and feathers imported into Japan is decreasing. The deterioration of quality is caused by the following.

- 1. Increased immature and microscopic down due to shortterm breeding
- 2. Mix "Crush Feathers" as a weighting agent

There is concern that down and feather products using these low-quality down will be on the Japanese market. Since it is difficult to test low-quality down with the current JIS, JIS is revised to improve the ability to detect low-quality down, and the purpose is to prevent low-quality down from appearing on the Japanese market.

Revision of Glossary of Terms JIS L 0216

Main Revision Down

Waterfowl feathers are composed of three or more barbs growing from a small quill point, and a maximum length of 3 mm or more, with either no or obscure quill shaft.

Down fiber

barbs with a length of 3 mm or more detached from the quill of down, which are each attached to two or less.

Feather fiber

Barb with a length of 3 mm or more detached from the quill of feather, which are not joined or attached together.

Landfowl fiber

Barb with a length of 3 mm or more detached from the quill of landfowl feather, which are not joined or attached together.

Verification of Benefits

Results of the composition test conducted with the current definition and the revision definition.

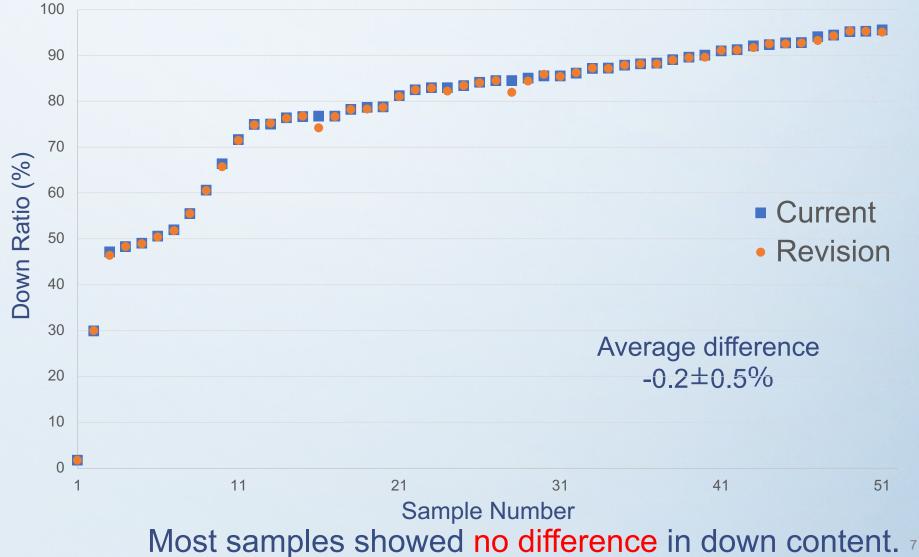
%±SD	Current definition average	Revision definition average	Average difference	
Down	77.8±18.5 77.5±18.5		-0.2 ± 0.5	
Down fiber	4.3±2.6	4.2±2.4	0±0.5	
Feather fiber	2.9±2.2	2.6±1.8	-0.3 ± 0.4	
Small feather	13±15	13±15	0±0.1	
Large feather	0.6 ± 3.2	0.6±3.2	0±0	
Damage feather	0.8±1.4	0.8±1.4	0±0.1	
Landfowl feather	0.3±1.1	0.3±1.1	0±0	
Residual matter	0.4±0.2	1±0.8*	0.6±0.7	

n=51 * vs Current definition average (student's T-test P < 0.05)

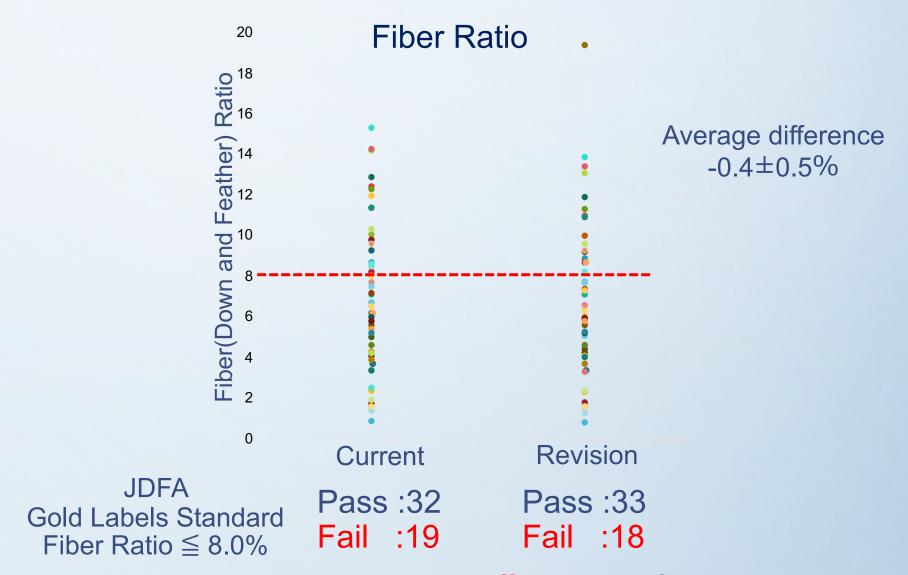
Residual matter ratio increased significantly.

Verification of benefits

Down Content

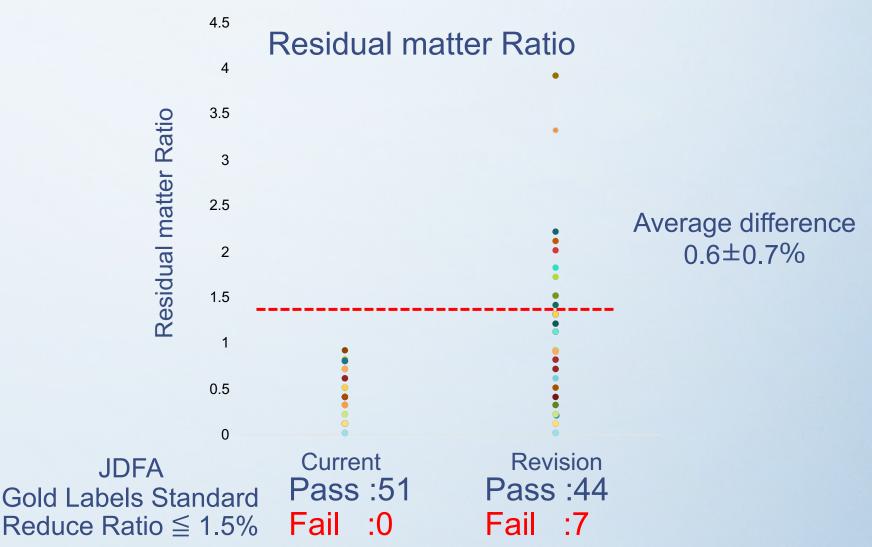


Verification of benefits



Most samples showed no difference in fiber ratio.

Verification of benefits



7 samples showed an increase significantly in residual matter ratio.

Conclusion

In the composition ratio test as the definition of revision, the down content and fiber ratio no difference. On the other hand, the residual matter ratio increased significantly.

It was believed to be the result of improper down and fiber being removed and classified as residual matter. We believe that this revision of the definition will improve the power to detect low-quality down and feahers.

JIS Revision Status

The JIS final Proofreading was completed in May 2022.

The revised JIS will be published within the autumn-winter 2022.

2) "Definition" and "Standard Labels" of Recycled Down and Feathers

"Definition" and "Standard label" of Recycled Down and Feathers.

In recent years, the demand for recycled down and feathers has been increasing in the Japanese market. JDFA decided to create definition of "Recycled down and feathers" and "Standard labels".

Definition

Term	Definition		
Recycled down and feathers	Down and feathers that have been reprocessed (washed and refined) from reclaimed (used) down and feathers.		
Used down and feathers	 Down and feathers taken out from used down and feather finished products or finished products that have been washed. 		

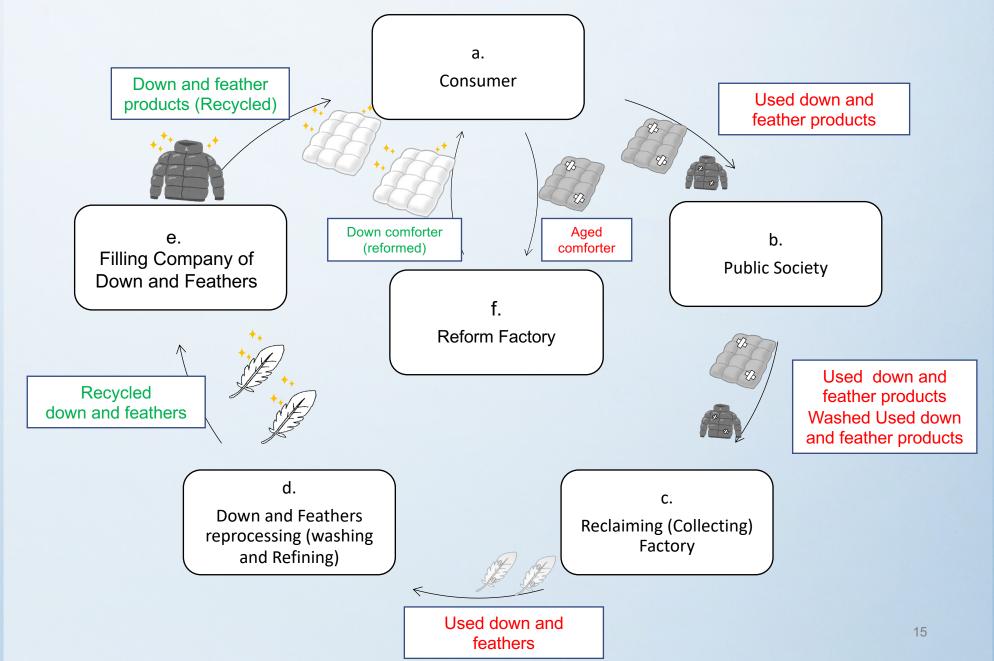
"Definition" and "standard label" of Recycled Down and Feathers.

Label Quality Standards (Down Comforter)

The quality standard applies to products that contain 100% Recycled down and feathers. We have set quality standards for each Down Power instead of Down content.

Label Classification	Down Power	Turbidity	Oxygen Number	Fiber	Residual Matter
A	400dp	1,000mm	≦ 4.8mg	≦ 8.0%	≦ 1.0%
В	350dp	1,000mm	≦ 4.8mg	≦ 8.0%	≦ 1.5%
С	300dp	1,000mm	≦ 4.8mg	≦ 8.0%	≦ 1.5%
D	250dp	1,000mm	≦ 4.8mg	≦ 10.0%	≦ 1.5%

Recycle-Based Society for "Recycled Down and Feathers" In Japan



Thank you.