

試験報告書

Test report

依頼者 株式会社 ワークソリューション

Requester ここにテキストを入力 Work Solution Co., Ltd.

一般財団法人

日本食品分析センター

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General Incorporated Foundation
Japan Food Research Laboratories
52-1, Motoyoyogicho, Shibuya-ku, Tokyo検体 ソルパット(紫外線照射装置)
Specimen Solpat (Ultraviolet irradiation device)表題 殺菌効果試験
title Bactericidal effect test2019 年 10 月 23 日当センターに提出された上記検体について試験した結果をご報告いたします。
October 23, 2019 We would like to report the test results of the above samples submitted to our center.

殺菌効果試験

Bactericidal effect test

1 依頼者

Requester

株式会社 ワークソリューション
Work Solution Co., Ltd.

2 検体

Specimen

ソルパット(紫外線照射装置)

Solpat (Ultraviolet irradiation device)

3 試験概要

Exam outline

シャーレに試験菌液を滴下し、試料とした。検体内の依頼者指定位置に試料を設置し、所定時間検体を照射した後、試料の生菌数を測定した。

The test bacterial solution was added dropwise to the petri dish to prepare a sample.

The sample was placed at the position specified by the client in the sample, irradiated with the sample for a predetermined time, and then the viable cell count of the sample was measured.

4 試験結果

Test results

結果を表-1及び2、試験条件を表-3に示した。また、培養後の生菌数測定平板を写真-1～12に示した。The results are shown in Tables 1 and 2, and the test conditions are shown in Table 3. In addition, the viable cell count measurement flat plates after culturing are shown in Photos-1 to 12.

Table-1 Measurement results of viable cell count of sample

表-1 試料の生菌数測定結果

試験菌 Test bacteria	対象 subject	生菌数(/個) Viable cell count (/Pieces)
	照射前① Before irradiation ①	8.3×10^5
枯草菌 (芽胞) Bacillus subtilis (spore)	検体照射約1秒後 Approximately 1 second after sample irradiation	5.3×10^4
	検体照射約2秒後 Approximately 2 seconds after sample irradiation	2.8×10^3
	検体照射約3秒後 Approximately 3 seconds after sample irradiation	3.3×10^2

試料：シャーレ(φ90 mm)に試験菌液0.1 mLを滴下したもの

Sample: 0.1 ml of test bacterial solution dropped on a petri dish (Φ90 mm)

Table-2 Measurement results of viable cell count of sample
 表-2 試料の生菌数測定結果

試験菌 Test bacteria	対象 subject	生菌数 (/個) Viable cell count (/ Pieces)
枯草菌 (芽胞) Bacillus subtilis (spore)	照射前② Before irradiation ②	5.4 × 10 ⁵
	検体照射約4秒後 Approximately 4 seconds after sample irradiation	<10
	検体照射約6秒後 Approximately 6 seconds after sample irradiation	<10
	検体照射約8秒後 Approximately 8 seconds after sample irradiation	<10
	検体照射約10秒後 Approximately 10 seconds after sample irradiation	<10
	検体照射約12秒後 Approximately 12 seconds after sample irradiation	<10
	検体照射約14秒後 Approximately 14 seconds after sample irradiation	<10
	検体照射約16秒後 Approximately 16 seconds after sample irradiation	<10

試料：シャーレ(φ90 mm)に試験菌液0.1 mLを滴下したもの
 Sample: 0.1 ml of test bacterial solution dropped on a petri dish (Φ90 mm)
 <10: 検出せず
 <10: Not detected

 Table-3 Test conditions
 表-3 試験条件

試験菌液 Test bacterial solution	試験菌 Test bacteria	<i>Bacillus subtilis</i> NBRC 3134(枯草菌) (<i>Bacillus subtilis</i>)
	前培養：普通寒天培地[Eiken化学株式会社], 30 °C ± 1 °C, 7~10日間 加熱条件：70 °C ± 1 °C, 20分間 菌液調製溶液：精製水 菌数(芽胞)：約10 ⁶ /mL	7-10 days Heating conditions: 70 °C ± 1 °C, 20 minutes Bacterial solution preparation solution: purified water Number of bacteria (spores): Approximately 10 ⁶ / ml
試料 sample	シャーレ(φ90 mm)に試験菌液0.1 mLを滴下したもの 0.1 ml of test bacterial solution dropped on a petri dish (Φ90 mm)	
試験操作 Test operation	検体内の依頼者指定位置に試料を設置し、検体を照射した。 The sample was placed at the position specified by the client in the sample and irradiated with the sample.	
検体照射時間 Specimen irradiation time	約1秒, 約2秒, 約3秒, 約4秒, 約6秒, 約8秒, 約10秒, 約12秒, 約14秒, 約16秒 About 1 second, about 2 seconds, about 3 seconds, about 4 seconds, about 6 seconds About 8 seconds, about 10 seconds, about 12 seconds, about 14 seconds, about 16 seconds	
試料の 洗い出し Washing out the sample	SCDLP培地[日本製薬株式会社], 10 mL SCDLP medium (Nihon Pharmaceutical Co., Ltd.)	
生菌数測定 Viable cell count measurement	標準寒天培地[Eiken化学株式会社], 混釈平板培養法 Standard agar medium (Eiken Chemical Co., Ltd.) Pour plate culture method	35 °C ± 1 °C, 2日間 2 days



写真-1 枯草菌(芽胞) 照射前①
Photo-1 Bacillus subtilis (spores) Before irradiation ①
(洗い出し液 1 mL)
(Washing liquid 1 ml)



写真-2 枯草菌(芽胞) 検体照射約1秒後
Photo-2 Bacillus subtilis (spores) Approximately 1 second after sample irradiation
(洗い出し液 1 mL)
(Washing liquid 1 ml)



写真-3 枯草菌(芽胞) 検体照射約2秒後
Photo-3 Bacillus subtilis (spores) Approximately 2 seconds after sample irradiation
(洗い出し液 1 mL)
(Washing liquid 1 ml)



写真-4 枯草菌(芽胞) 検体照射約3秒後
Photo-4 Bacillus subtilis (spores) Approximately 3 seconds after sample irradiation
(洗い出し液 1 mL)
(Washing liquid 1 ml)



写真-5 枯草菌(芽胞) 照射前②
Photo-5 Bacillus subtilis (spores) Before irradiation ②
(洗い出し液 1 mL)
(Washing liquid 1 ml)

Preculture: Normal agar medium

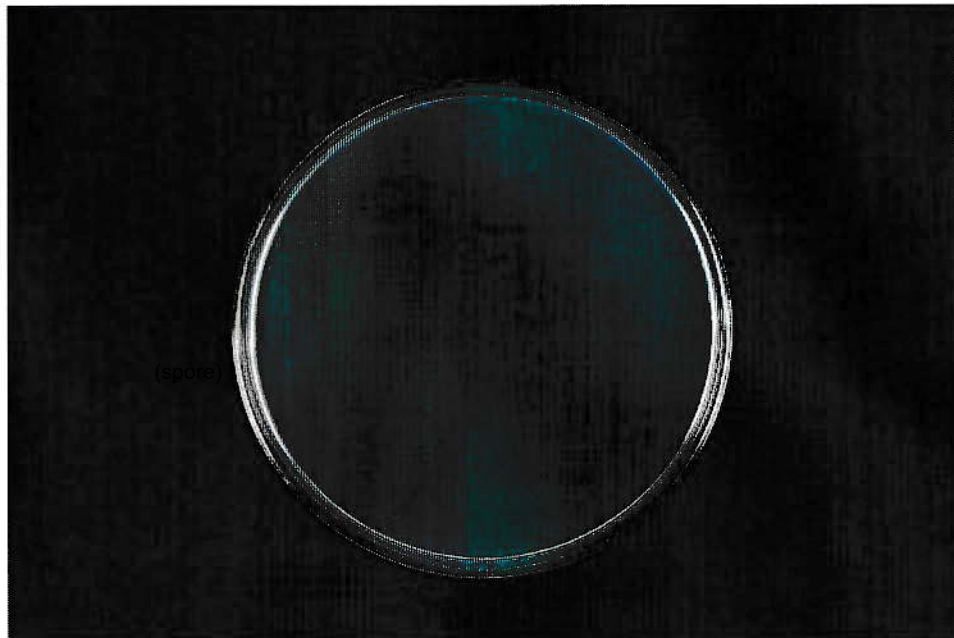


写真-6 枯草菌(芽胞) 検体照射約4秒後
Photo-6 Bacillus subtilis (spores) Approximately 4 seconds after sample irradiation
(洗い出し液 1 mL)
(Washing liquid 1 ml)



写真-7 枯草菌(芽胞) 検体照射約6秒後
Photo-7 Bacillus subtilis (spores) Approximately 6 seconds after sample irradiation
(洗い出し液 1 mL)
(Washing liquid 1 ml)



写真-8 枯草菌(芽胞) 検体照射約8秒後
Photo-8 Bacillus subtilis (spores) Approximately 8 seconds after sample irradiation
(洗い出し液 1 mL)
(Washing liquid 1 ml)

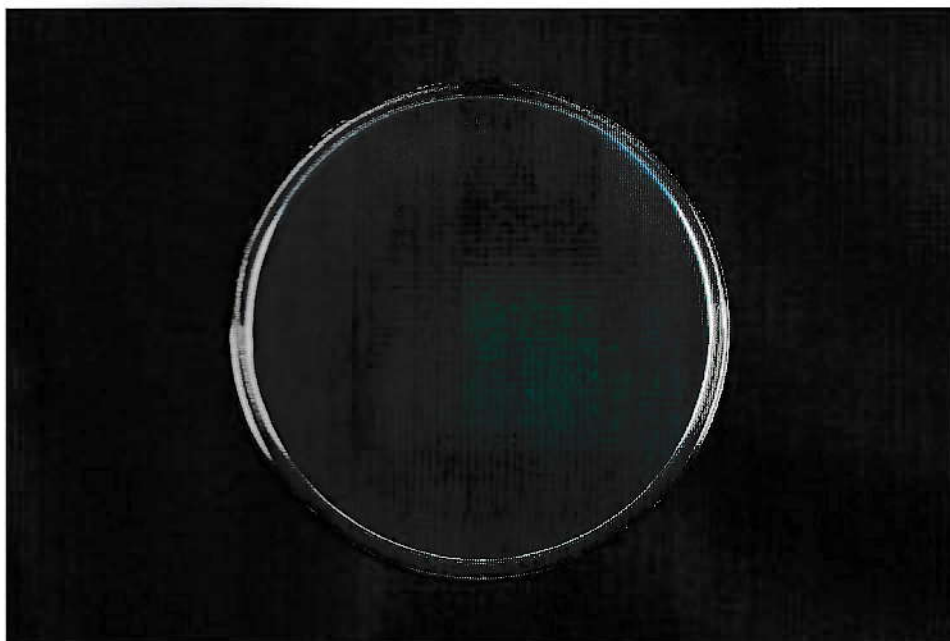


写真-9 枯草菌(芽胞) 検体照射約10秒後
Photo-9 Bacillus subtilis (spores) Approximately 10 seconds after sample irradiation
(洗い出し液 1 mL)
(Washing liquid 1 ml)



写真-10 枯草菌(芽胞) 検体照射約12秒後
Photo-10 Bacillus subtilis (spores) Approximately 12 seconds after sample irradiation
(洗い出し液 1 mL)
(Washing liquid 1 ml)



写真-11 枯草菌(芽胞) 検体照射約14秒後
Photo-11 Bacillus subtilis (spores) Approximately 14 seconds after sample irradiation
(洗い出し液 1 mL)
(Washing liquid 1 ml)

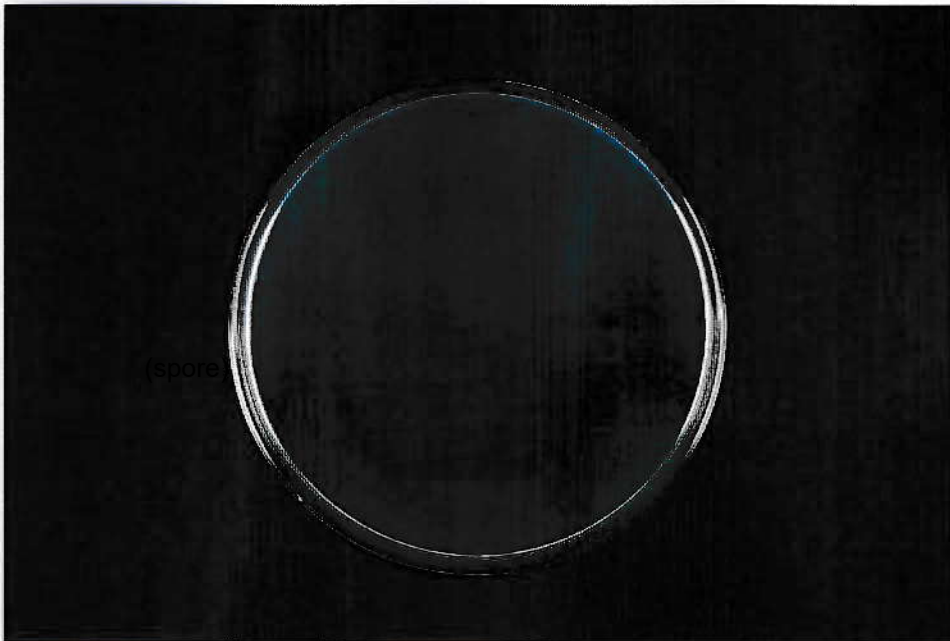


写真-12 枯草菌(芽胞) 検体照射約16秒後
Photo-12 Bacillus subtilis (spores) Approximately 16 seconds after sample irradiation
(洗い出し液 1 mL)
(Washing liquid 1 ml)

以 上
that's all