



HOKKAIDO UNIVERSITY

Title	一新毒菌シビレタケに就きて
Author(s)	今井, 三子
Citation	札幌博物学会会報, 12(2-3), 148-151
Issue Date	1932-07-10
Doc URL	https://hdl.handle.net/2115/64011
Type	journal article
File Information	Vol.12No.2-3_014.pdf



ON STROPHARIA CAERULESCENS, A NEW SPECIES OF POISONOUS TOADSTOOL

BY

SANSHI IMAI

(With One Text Figure)



According to the statistics published by the Japanese Sanitary Bureau, 344 cases of intoxication caused by toadstools have been reported in the year of 1929. Among them, 10 patients had resulted in death. In the same year, the writer had an opportunity to study on an undescribed fungus which causes a special intoxication. In 1931, he met again with a case of poisoning by the same fungus near Asahigawa, in the province of Ishikari, Hokkaido.

In the present short paper, the writer intends to describe this new species of toadstool and the symptoms caused by it.

The writer wishes to express his sincere thanks to Prof. Emer. KINGO MIYABE and Prof. SEIYA ITO for their kind advices and also to Mr. Y. KANNO, doctor of the Japanese Red-Cross Hospital at Asahigawa, for his kind information.

I. Causal Fungus

Stropharia caerulescens IMAI, spec. nov.

Fungi gregarii vel caespitosi. Pileo carnoso, convexo-plano vel subumbonato, hygrophano vel vix viscidulo, glabro, luteolo vel isabellino raro albido, margine pallido, 1.5–6 cm. lato; lamellis adnatis, e pallido violaceo-fuscis; stipite subcavo, aequali, albido, sicco, infra annulum fibrilloso, 3.5–9 cm. longo, 5–9 mm. crasso; annulo subsuperiori, tenuissimo-membranaceo, rarius fibrilloso, saepe evanescente; carne albida vel pallida, caerulescente; sporis fuscis vel violaceo-fuscis, ellipsoideis, $7-10.5 \times 4.25-7 \mu$; cystidiis nullis.

Hab. ad terram et stercus. Hokkaido: Prov. Ishikari. Junius, Julius et October.

Nom. Jap. *Shibire-take* (n. n.)

The specimen of the present fungus which has turned blue in color some-

what resembles *Stropharia aeruginosa* Fr., from which it is easily distinguished by the hygrophanous and glabrous pileus and nongelatinous stem, as well as



Stropharia caerulescens IMAI, about half natural size

by the discoloring character of the context which changes from whitish color to azure-blue when it was bruised or wounded.

II. Symptoms of Intoxication

1. *Case of poisoning at Sapporo*:—From the reports of the chief of Sapporo Police-Station and of the doctor who had attended the patients, and also by the direct narrative of the patients, the writer summarizes here the intoxication-process. The symptoms in this case are as follows:—

In the afternoon of the 21st of June, 1929, Mrs. S. (43 years old and healthy) collected in a private garden about 375 grams of the toadstool which he had erroneously recognized as *Armillaria mellea*. In the next morning she cooked the fungus with turnip in the miso-soup and all the members of her family, the husband (46 years old and healthy) and a son (14 years old and healthy) ate it. Soon after the breakfast their body became abnormal. Mr. S. felt so feverish at his stomach as if he had drunk alcoholic liquor at hungry time and the limbs became somewhat paralyzed. Mrs. S. became giddy and her face turned pale. Then, they hurried to the nearest hospital about 500 meters apart.

Mrs. S. was most serious. She was in a slightly comatose condition during her walking and felt several times the sensation of falling forward. The doctor immediately drugged an emetic and washed the stomach and then administered a laxative. After these treatment she was calmly laid down on bed. While she was in bed, she felt intermittently the constriction or trembling of muscles and finally she came into hallucinosis then coma.

Since the laxative resulted with success, she gradually recovered from the above written symptoms. For a few days after this accident she was obliged

to care for the stomach which was badly affected by the toadstool.

Their son who did not eat flesh of the toadstool but drank only the soup, felt a chill and paralysis of the limbs, followed by hallucination.

Mr. S. felt also a paralysis of the limbs, but he escaped from other agonies owing to his artificialy induced vomiting immediately after he had felt the poisoning.

Mr. and son were also drugged an emetic and laxative, and they recovered completely the next day.

2. *Case of poisoning at Asahigawa*:—After the report of the chief of Asahigawa Police-Station and the information kindly sent by the doctor at the writer's request, the intoxication-process and symptoms of this case are described as follows:

In the morning (about 6 o'clock) of the 11th of October, 1931, Mrs. M. (22 years old and well nourished woman), who is addicted to the mushroom-eating, collected about 375 grams of the toadstool which had grown on horse-dung in her backyard and cooked the fungus with raddish in the miso-soup and then ate them all at about 7 o'clock. About 10 minutes later she felt a chill and paralysis of the limbs. Her face turned pale and after about 30 minutes she lost her sight and fell down into a comatose condition. Then, she was carried to an hospital far way about 6 kilometers and consulted at 11 o'clock A. M.

At this time she had utterly fallen down into coma, losing her consciousness and talking in delirium. The pupils had opened to a medium size and not reacted to light. The cardiac sound was pure, the pulse was moderate, regular and tight, the breast and abdomen were normal, cyanosis appeared on the lips, the patellar-reflex was sensitive; and no trismus, no diarrhea, no vomiting, no perspiration and no drivel had occurred.

The doctor immediately injected camphor and 800 grams of the RINGER's solution, then washed her stomach and obtained about 500 grams of food-dregs in which are contained a large amount of the toadstool. After this treatment the patient was calmly laid down on bed. At 4 o'clock P. M. she regained somewhat her consciousness and in the next morning restored her health. In the afternoon of the 14th, when the doctor consulted the patient he did not recognize any abnormal symptom except the patellar-reflex was sensitive.

Botanical Institute, Faculty of Agriculture,
Hokkaido Imperial University,
Sapporo, Japan

摘 要

一新毒菌シビレタケに就きて

今 井 三 子

昭和四年六月、札幌市苗穂に於て、又昭和六年十月、旭川市近郊神居村に於て一種の茸による中毒者を出せり。之れを調査するにモエギタケ (*Stropharia aeruginosa*) に類似せる一新種なるを以て和名を其中毒症状よりシビレタケ (*Stropharia caerulescens* IMAI) と命名し、記相文と共に其中毒症状の概要を報告せり。

本菌は地上或は馬糞上等に多數群生し、中高の平蓋を有し、表面淡黄色或は白色にして、肉は初め白色なるも負傷せる時は空青色に變色す。莖は白色。柄は莖に直生し初め白色なるも後ち紫褐色となる。(挿圖は實物大の約半分)

モエギタケとは蓋及び莖が粘質ならざる點と、肉が變色する點に於て容易に區別さる。

中毒症状は食後數分にして既に体に麻痺を感じ、顔面蒼白となり、次第に視力を減じ、30分位にして意識を失ひ、痛覺を欠き譫語を發するに至る。然れ共下痢、嘔吐、發汗等の症状なし。

吐劑、下劑等により手當をなせるに數時間にして意識を次第に回復し來たり、翌日に於て殆ど全快するに至る。

要するに從來知られたる多數の毒菌による症状に比して、本菌による中毒は其症状の發現迅速なる事、知覺神經の障碍さるゝ事、体の麻痺を起す事、下痢、嘔吐、發汗等の症状なき事、及び致命的ならざるものゝ如き點に於て特異の症状となすを得べし。