

## 鹿児島県佐多岬周囲の菌類相 (第2報) 外生菌根菌

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(演習林)

### Fungi In Cape-Sata And The Adjacent Area, Kagoshima Pref. (2) Ectomycorrhizal Fungi

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#### 1. はじめに

前報告では<sup>19)</sup> リッター分解に大きな役割をはたしている腐生菌についての報告を行ったが、この報告では樹種との結びつきが腐生菌より強い外生菌根菌について報告する (ただし同定できたもののみ)。

なお同定および分布等については Kobayasi<sup>1-18,20)</sup> らを参考にした。

#### 2. 調査地域の樹木について

調査地域で外生菌根菌が寄主とし得る樹木は、マツ科ではクロマツ (*Pinus Thunbergii* Parl.), リュウキュウマツ (*Pinus luchuensis* Mayr), ブナ科ではイタジイ (*Casatnopsis sieboldii* Hatsusima), アラカシ (*Quercus glauca* Thunb.), ウバメガシ (*Quercus phillyr aeoides* A. Gray), マテバシイ (*Lithocarpus edulis* Rehd.) であった。

これら樹木は純林に近い森林もあればまたこれら樹木が混交している森林もあった。なおリュウキュウマツは農学部佐多演習林に植栽されている人工林である。

#### 3. 出現した菌類

##### EUBASIDIOMYCETES

##### APHYLLOPHORALES

*Cantharellus cibarius* Fr.

Hab. On the ground in the forest of *Lithocarpus edulis*.

Distr. Widely spread in the world.

##### AGARICALES

*Laccaria amethystea* (Bull.) Murr.

Hab. On the sandy ground in *Pinus Thunbergii* forest.

Distr. Northern hemisphere.

*Laccaria laccata* (Scop.: Fr.) Berk. et Br.

Hab. May, scattered on the ground by roadside in mixed forest of *Castanopsis sieboldii*, *Pinus Thunbergii* etc.

Distr. Widely spread in the world.

*Tricholoma flavovirens* (Pers.: Fr.) Lund

Hab. July, scattered on the ground in *Quercus phillyraeoides* forest.

Distr. Europe, North America, Japan.

*Tricholoma ustale* (Fr.: Fr.) Kummer

Hab. Summer to autumn, scattered to gregarious on the ground in forest of *Lithocarpus edulis*.

Distr. Temperate zone of the northern hemisphere.

*Tricholoma bakamatsutake* Hongo

Hab. June, Oct., Nov., scattered on the ground in forest of *Lithocarpus edulis*.

Distr. Japan, New Guinea.

*Amanita abrupta* Peck

Hab. September, scattered on the ground in forest of *Lithocarpus edulis*.

Distr. North America, Japan.

*Amanita vaginata* (Fr.) Vitt.

Hab. Solitary, on the ground in the forest of *Lithocarpus edulis*.

Distr. Northern hemisphere.

*Amanita sychnopyramides* Corner et Bas f. *subannulata* Hongo

Hab. Sep., solitary on the ground in the forest of *Lithocarpus edulis*.

Distr. Endemic (West of Shiga)

*Amanita virosa* Secr.

Hab. June, solitary on the ground in forest of *Lithocarpus edulis*.

Distr. Europe, North America, Japan.

*Amanita pseudoporphyria* Hongo

Hab. May, solitary to scattered on the ground in forest of *Lithocarpus edulis*.

Distr. Endemic

*Amanita gymnopus* Corner et Bas

Hab. Sep., scattered on the ground in forest of *Lithocarpus edulis*.

Distr. Malaysia, Japan (West of Honsyu)

*Amanita hemibapha* (Berk. et Br.) Sacc. *subsp. hemibapha*

Hab. September, scattered on the ground in forest of *Lithocarpus edulis* or mixed forest of *Castanopsis sieboldii*-*Quercus glauca*.

Distr. China, Ceyron, North America, Japan.

*Amanita fuliginea* Hongo

Hab. On the ground in the forest of *Quercus phillyraeoides*.

Distr. Endemic.

*Amanita excelsa* (Fr.) Bertillon

Hab. May, July, on the ground in the forest of *Lithocarpus edulis*.

Distr. Northern hemisphere.

*Amanita spissacea* Imai

Hab. On the ground in the forest of *Lithocarpus edulis*.

Distr. China, Korea, Japan.

*Dermocybe cinnamomea* (L.: Fr.) Wunshe

Hab. May, solitary under *Pinus Thunbergii*.

Distr. Northern hemisphere.

*Gomphidius roseus* (Fr.) Karst.

Hab. November, scattered on the ground in planted forests of *Pinus Thunbergii*.

Distr. Europe, Japan.

*Gyroporus castaneus* (Bull.: Fr.) Quel.

Hab. June, solitary under mixed trees of *Castanopsis sieboldii-Quercus glauca*.

Distr. Asia, Europe, North America, Australia, Japan.

*Suillus bovinus* (Fr.) O. Kuntze

Hab. November, scattered on the ground in planted forests of *Pinus Thunbergii*.

Distr. China, Europe, North America, Siberia, Africa, Japan.

*Suillus granulatus* (L. ex Fr.) O. Kuntze

Hab. September, solitary on the ground in planted forests of *Pinus Thunbergii*.

Distr. Europe, Siberia, North America, Australia, Japan.

*Boletus reticulatus* Schaeff.

Hab. July, solitary on the ground in forest of *Quercus phillyraeoides*.

Distr. Europe, Japan.

*Boletus ornatipes* Peck

Hab. July, on the ground in forest of *Quercus phillyraeoides*.

Distr. North America, East Asia, Japan.

*Boletus griseus* Frost var. *fuscus* Hongo

Hab. On the ground in planted forests of *Pinus Thunbergii*.

Distr. Endemic.

*Tylopilus virens* (Chiu) Hongo

Hab. June, on the ground in the forest of *Lithocarpus edulis*.

Distr. China, Japan.

*Tylopilus eximius* (Peck) Sing.

Hab. June, scattered on the ground in forest of *Lithocarpus edulis*.

Distr. East Asia, North America, Japan

*Strobilomyces strobilaceus* (Scop.: Fr.) Berk.

Hab. July, scattered on the ground in forest of *Lithocarpus edulis*.

Distr. Europe, North America, Japan.

*Austroboletus gracilis* (Peck) Wolfe

Hab. Scattered, on the ground in the forest of *Lithocarpus edulis*.

Distr. North America, New Guinea, Japan.

*Russula compacta* Frost et Pk.

Hab. Scattered, on the ground in the forest of *Quercus phillyraeoides*.

Distr. North America, Japan.

*Russula senecis* Imai

Hab. On the ground in the forest of *Lithocarpus edulis*.

Distr. East Asia, New Guinea.

*Russula cyanoxantha* (Secr.) Fr.

Hab. May, solitary on the ground in the forest of *Lithocarpus edulis*.

Distr. Northern hemisphere, Australia.

*Russula amoena* Quel.

Hab. On the ground in the forest of *Quercus phillyraeoides*.

Distr. Europe, Japan.

*Russula mariae* Peck

Hab. On the ground in the forest of *Lithocarpus edulis*.

Distr. East Asia, North America.

*Russula virescens* (Schaeff.) Fr.

Hab. July, on the ground in forest of *Lithocarpus edulis*-*Castanopsis sieboldii* and forest of *Quercus phillyraeoides*.

Distr. Northern hemisphere (north of temperate zone).

*Russula rosaceae* (Pers.) S. F. Gray

Hab. July, on the ground in forest of *Lithocarpus edulis*, forest of *Quercus phillyraeoides*.

Distr. Northern hemisphere.

*Russula aurata* Fr.

Hab. June, solitary to gregarious on the ground in forest of *Lithocarpus edulis* and forest of *Quercus phillyraeoides*.

Distr. Northern hemisphere.

*Lactarius hygrophoroides* Berk. et Curt.

Hab. July, on the ground in forest of *Lithocarpus edulis*.

Distr. North and South America, Japan.

*Lactarius vellereus* (Fr.) Fr.

Hab. On the ground in the forest of *Castanopsis sieboldii*.

Distr. Northern hemisphere.

*Lactarius subzonarius* Hongo

Hab. On the ground in the forest of *Lithocarpus edulis*.

Distr. Korea, Japan.

*Lactarius akahatu* Tanaka

Hab. November, scattered on the ground in the forest of *Pinus Thunbergii*.

Distr. Korea, Formosa, Japan.

*Lactarius indigo* (Schw.) Fr.

Hab. October, scattered on the ground in forest of *Lithocarpus edulis*.

Distr. North America, Japan.

#### 4. 分布上興味ある菌類

1. *Tricholoma ustale* (Fr.: Fr.) Kummer

北半球温帯林のキノコ。夏から秋にかけマテバシイ林内地上。

2. *Tricholoma bakamatsutake* Hongo (Plate-1)

日本, ニューギニアに分布。記載によるとコナラ, ミズナラ, ウバメガシなどの樹下に発生するようだが, 本地域ではマテバシイ林に発生する。また基本種とは肉を傷つけると紫色に変色する点において異なる。マテバシイ林内地上。

3. *Amanita gymnopus* Corner et Bas (Plate-2)

当初マレーシアにて発見, 日本では関東以西に分布。マテバシイ林内地上。

4. *Tylopilus virens* (Chiu) Hongo

日本, 韓国, 中国 (雲南), ボルネオに分布。マテバシイ林内地上。

5. *Russula senecis* Imai

東アジア, ニューギニアに分布。マテバシイ林内地上。

6. *Lactarius akahatu* Tanaka (Plate-3)

日本, 韓国, 台湾に分布, 小笠原島にも産する。クロマツ林内地上。

7. *Lactarius indigo* (Schw.) Fr. (Plate-4)

日本 (東北以南), 北アメリカ東部。マテバシイ林内地上。

### 要 約

鹿兒島県佐多岬とその周辺の外生菌根菌について調査した結果, 2目38種1亜種1変種1品種あった。また菌根菌の寄主となる樹木はクロマツ, リュウキュウマツ, イタジイ, アラカシ, ウバメガシ, マテバシイであった。

分布的に興味を引く菌類は *Tricholoma ustale* (Fr.: Fr.) Kummer, *Tricholoma bakamatsutake* Hongo, *Amanita gymnopus* Corner et Bas, *Tylopilus virens* (Chiu) Hongo, *Russula senecis* Imai, *Lactarius akahatu* Tanaka, *Lactarius indigo* (Schw.) Fr. などであった。

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### Summary

The present paper deals with the ectomycorrhizal fungus flora in Cape-Sata and the adjacent area, the northernmost region of subtropical zone in Japan. The associated trees with ectomycorrhizal fungi in this area are *Pinus Thunbergii* Parl., *Pinus luchuensis* Mayr (planted trees in the Sata Experimental Forest of Kagoshima Univ.), *Casatnopsis sieboldii* Hatsusima, *Quercus glauca* Thunb., *Quercus phillyraeoides* A. Gray and *Lithocarpus edulis* Rehd.

The results are as follows:

In this area there occur 2 orders, 38 species, 1 subspecies, 1 variety and 1 form.

Interesting fungi are as follows:

*Tricholoma ustale* (Fr.: Fr.) Kummer

*Tricholoma bakamatsutake* Hongo

*Amanita gymnopus* Corner et Bas

*Tyopilus virens* (Chiu) Hongo

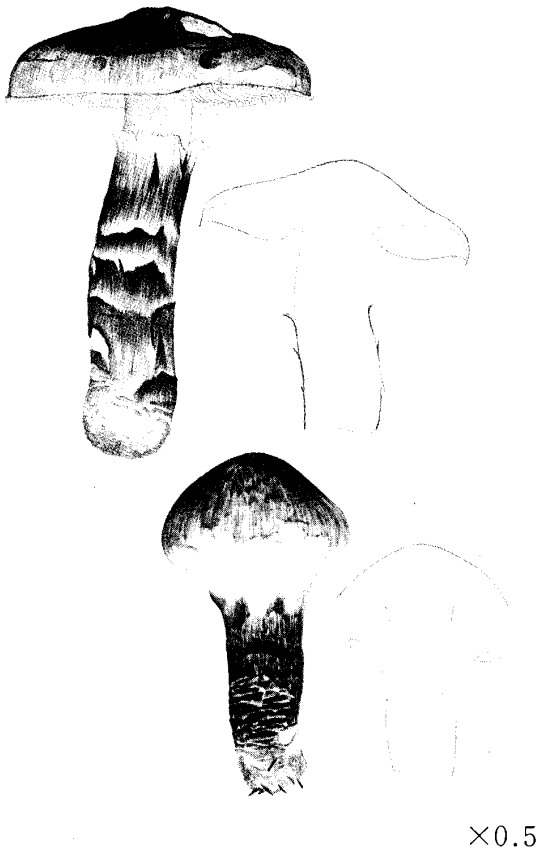
*Russula senecis* Imai

*Lactarius akahatu* Tanaka

*Lactarius indigo* (Schw.) Fr.

Plate

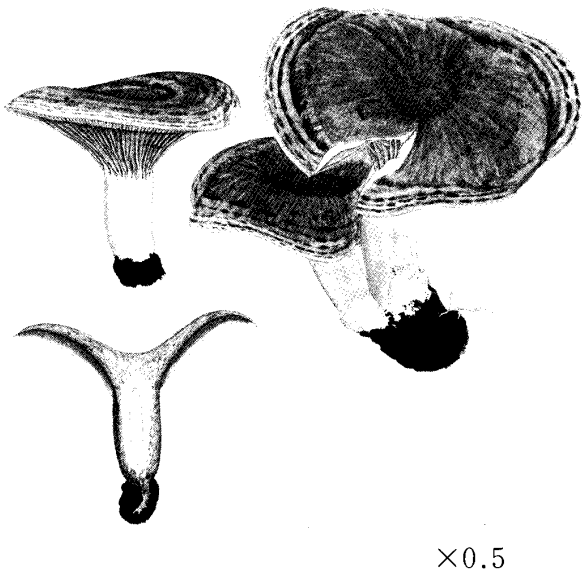
1. *Tricholoma bakamatutake*



2. *Amanita gymnopus*



3. *Lactarius akahatsu*



4. *Lactarius indigo*

