

市場品のいわゆるメシマコブの形態について¹⁾久田 陽一^{*,a}, 奥田 和代^a, 川村 智子^a, 近藤 寿美^b^a名城大学薬学部, ^b松浦薬業株式会社

Forms of what is Commercially Called Mesimakobu

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Morphological characteristics of the polypores used as an antitumour agent have been compared using a light microscope and a scanning electron microscope. The fruit bodies of commercially available samples were grouped into three types according to their external appearance, e.g., cap shape, surface color, annulus, fissure and crust. The microscopic characteristics of setae in the Hymenochaetaceae family was partially observed in those samples found to be *Phellinus* spp.. The basidiomycetes, what is called Mesimakobu, were characterized by their external appearance.

Keywords: *Phellinus*; mesimakobu; Hymenochaetaceae; polypores; basidiomycetes; seta

担子菌類の抗腫瘍活性が報告²⁻⁴⁾され、メシマコブ *Phellinus linteus* (BERK. et CURT.) TENG に最も強い作用が認められたことから、市場でのメシマコブの需要が急激に増加し、いわゆる‘サルノコシカケ’と呼ばれる子実体が流通するようになってきた。そこで名古屋および大阪の市場品を集め、市場での現状調査を行う目的でこれらの子実体について比較を行った。

市場品の外部形態は傘の形状から、表面が黒褐色で偽殻化し、環溝と縦横の亀裂が顕著で山形～蹄形のもの(A型)、表面は黒色で殻皮があり亀裂が少なく蹄形～鐘状のもの(B型)、表面は環溝が顕著で殻皮があり、扁平～山形で下面は帯白色もの(C型)に分類された(Fig. 1)。また、A型の下面は淡黄褐色～茶褐色で、肉は黄茶褐色～茶褐色、傘の部分と管孔層の肉が均質のもの、管孔層に白色の2次菌糸が入り込んだものが見られた。B型の下面は黄褐色、肉は黄褐色～茶褐色で傘の部分と管孔層に分かれている。C型では下面が灰黄白色～灰白色のものと灰褐色のもの(C')が見られ、肉は淡黄褐色～暗褐色で層状を呈した。顕微鏡的形態では *Phellinus* 属を含むタバコウロコタケ科(Hymenochaetaceae)の特徴は先の尖った剛毛体(setae)

を形成する⁵⁻⁷⁾と言われ、A型とB型の一部で確認できたが、子実層が2次菌糸で覆われていたりして確認できないものもあった(Fig. 2)。管孔の口径や子実層托での管孔の密度は個々に異なっていた(TABLE I)。子実層托の菌糸はA型では管状、B型、C型では内孔が無いが、孔が小さいものが多く見られた(Fig. 2, TABLE I)。

今回の試料ではA型が *Phellinus* 属の特徴を示し、‘メシマコブ’あるいは‘桑黄’と呼ばれていた。メシマコブは桑に寄生することから日本では桑黄^{6,8)}とも呼ばれるが、中国ではキノブタケ(針層孔) *Phellinus igniarius* (L. ex FR.) QUEL. を「桑黄 Sang-huang」の名で薬用⁹⁾としている。A型の市場品メシマコブと桑黄では外部形態でも顕微鏡的形態でも顕著な差は見られなかった。

以上より、メシマコブとして流通しているサルノコシカケ類の市場品は外部形態から3タイプに分類することができ、いわゆるメシマコブはA型の特徴を示す子実体であると言える。

文献および注

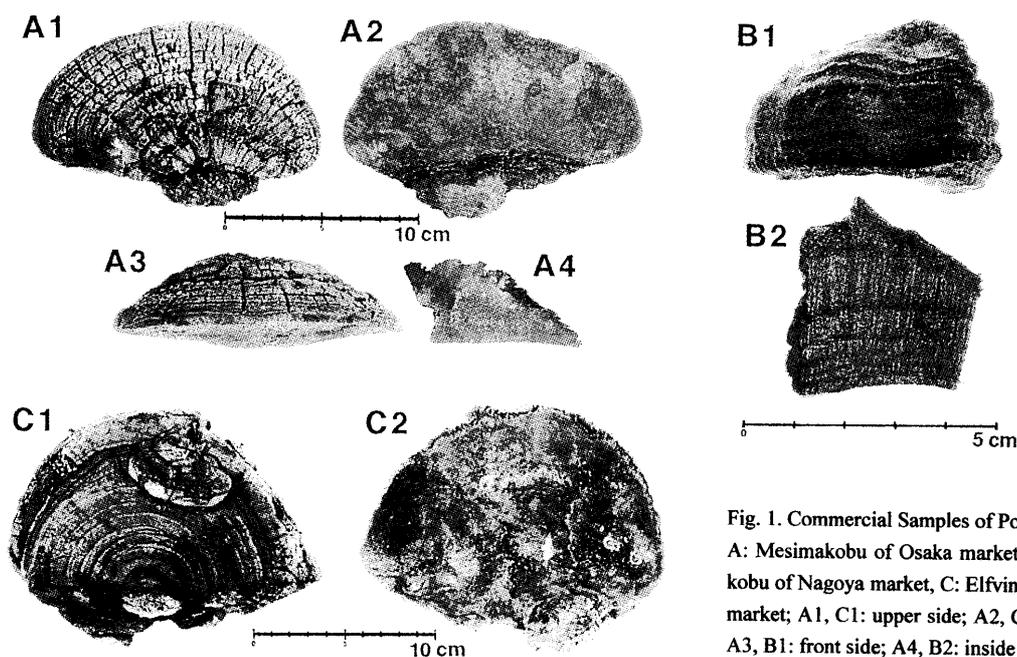


Fig. 1. Commercial Samples of Polypores
 A: Mesimakobu of Osaka market, B: Mesimakobu of Nagoya market, C: Elfvinga of Nagoya market; A1, C1: upper side; A2, C2: back side; A3, B1: front side; A4, B2: inside

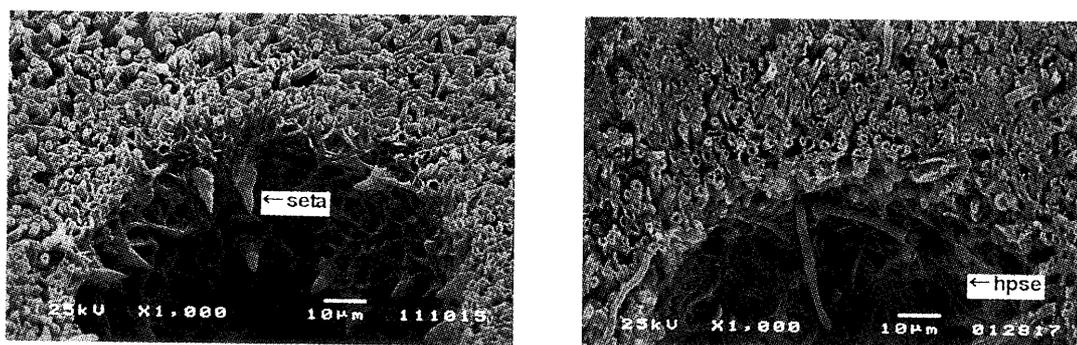


Fig. 2. SEM Micrographs of the Pore
 Left: Sang-huang of Nagoya market, right: Mesimakobu T2 of Nagoya market, hpse: secondary hyphae.

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TABLE I. Morphological Characteristics of the Fruit Bodies of Polypores on the Market

Type Sample name	Habitat	Market	Cap				Pore			Hypha		
			Shape	Surface	Surface color	Crust	Underside color	Inside color	Size (µm)		Voids (%)	Setae
A Mesimakobu	unknown	Os	convex	fissured	dark brown	-	brown	brown	158.1	41.4	un	0.31~1.25
A Mesimakobu T1	unknown, China	Na	convex	fissured	dark brown	-	yel-brown	yel-brown	165.0	38.5	un	0.20~0.75
A Mesimakobu T2	unknown, China	Na	convex	fissured	dark brown	-	yel-brown	yel-brown	179.8	46.0	un	0.31~1.88
A Mesimakobu T3	unknown, China	Na	convex	fissured	dark brown	-	yel-brown	yel-brown	169.6	38.5	-	0.31~1.56
A Sang-huang M4	Zhejiang, China	Na	convex	fissured	dark brown	-	pale yel-brown	yel-brown	153.0	55.7	+	0.25~2.00
A Sang-huang To1	unknown	Os	convex	fissured	dark brown	±	light yel-brown	yel-brown	146.3	60.4	un	0.31~1.25
A Sang-huang M2	Heilongjiang, China	Na	ungulate	fissured	dark brown	-	yel-brown	brown	128.1	43.4	+	0.38~1.00
B Sang-huang M3, cc	Liaoning, China	Na	un	smooth	brack	+	yel-brown	brown	188.0	27.0	+	(-)~1.00
B Elfvinga	Sichuan, China	Na	ungulate	smooth	brack	+	yel-brown	yel-brown	166.2	51.9	-	(-)~1.75
B Mesimakobu	unknown	Na	bellous	smooth	brack	+	yel-brown	yel-brown	301.7	55.5	-	0.31~1.88
C Elfvinga (Wt)	Jilin, China	Na	applanate	gnarled	gra-brown	+	gra-white	bro-white	165.2	70.2	-	(-)~0.25
C Elfvinga, cc	Nagano, Japan	Na	un	annual grooved	gra-brown	+	gra-brown	gra-yel-brown	291.4	47.0	-	(-)~2.50
C Elfvinga	Nagano, Japan	Na	applanate	annual grooved	gra-brown	+	yel-white	white, dark brown	172.7	59.8	-	(-)~0.75
C Sang-huang	unknown	Na	applanate	annual grooved	gra-brown	+	pale yel-brown	pale yel-brown	121.7	41.1	+	0.31~0.94
C' Elfvinga (Bk)	Jilin, China	Na	semicircular	annual grooved	gra-brown	+	gra-brown	white, whi-brown	163.3	62.7	±	(-)~1.00
Mesimakobu, cf	unknown	Na	un	un	dark brown	un	un	brown	129.8	50.2	+	0.31~1.25
Sang-huang, cf	unknown	Na	un	un	dark brown	+	brown	brown	147.4	31.9	+	0.31~1.25
A <i>Phellinus igniarius</i>	Nagoya, Japan	Wild	ungulate	fissured	dark brown	-	yel-brown	yel-brown	141.6	51.6	+	0.25~1.75
C Ganoderma	unknown, China	Na	applanate	annual grooved	gra-brown	+	yel-white	pale yel-brown	212.2	82.3	-	(-)~0.75

A, B, C: type of fruit body; cc: coarse cutting; cf: fine cutting; Wt: whitish fruit body; Bk: brownish fruit body; Market Os: Osaka, Na: Nagoya. Pore voids (%): voids/hymenophore × 100. +: Observed, -: absent, ±: some are observed, some are absent, un: unknown; hypha pore size (-): not pore. Color yel-: yellowish, whi-: whitish, gra-: graysh, bro-: brownish.