

BOLETI IN ALBERTA

These are lecture notes from our July 2003 monthly meeting given by Martin Osis. The information was gathered from “Mushrooms of North West North America“ by Helene Schalkwyk, “ Boleti of Alberta” by Randy Currah & Sean Abbott (1989) as well as some personal experience. The tips for identification are meant to point out some of the more obvious differences or the things to watch out for to help direct the identifier to the correct literature to verify positive identification. Most of the mushrooms listed I have found myself except for *Boletus zelleri*, *Fuscoboletinus aeruginascens*, *Fuscoboletinus serotinus*, and *Leccinum niveum*.

IN GENERAL, WE CAN DIVIDE BOLETES FOUND IN ALBERTA INTO THREE GROUPINGS. MOST GUIDES LIST MANY MORE GENERA BUT THESE HAVE NOT BEEN FOUND HERE YET. THEY ARE:

- BOLETUS
- SUILLUS
- FUSCOBOLETINUS
- LECCINUM

AS USUAL THE BEST METHOD TO IDENTIFY THE MUSHROOM YOU HAVE IS BY THE PROCESS OF ELIMINATION. BY UNDERSTANDING THE MAJOR GROUPS WE CAN QUICKLY ELIMINATE THE MAJORITY OF MUSHROOMS LEAVING US WITH GROUPINGS WE CAN NARROW IN ON.

WHEN LOOKING AT BOLETES, THE FIRST STEP WOULD BE TO MAKE SURE WE ARE LOOKING AT A MUSHROOM WITH TUBES AS OPPOSED TO GILLS OR OTHER SPORE DISPERSAL MECHANISMS. THE ONE AREA OF POSSIBLE CONFUSION IS WITH POLYPORES. POLYPORES DIFFER IN THAT THEY HAVE “PORES” RATHER THAN TUBES. THE DIFFERENCE IS THAT TUBE LAYERS ARE DEEP AND PORE LAYERS ARE NOT. THINK OF THE DIFFERENCE BETWEEN PORES ON YOUR SKIN & A SPONGE. THE OTHER DIFFERENCES ARE THAT POLYPORES ARE USUALLY TOUGH AND WOODY, MOST OFTEN GROWING ON WOOD. THERE ARE A FEW POLYPORES THAT GROW ON THE GROUND SUCH AS “ALBATRELLUS”. ASK YOURSELF IF THE SPECIMEN IS TOUGH OR LEATHERY OR DOES IT HAVE THE DEEP TUBE LAYER.

LECCINUMS

ALWAYS ELIMINATE THE EASIEST GROUP TO IDENTIFY FIRST. WITH BOLETES THE EASIEST ARE THE LECCINUMS OR “ROUGH STEMS”. LECCINUMS DIFFER FROM OTHER BOLETES IN THAT THEY HAVE TUFTED HAIRS OR SMALL ROUGH SCALES CALLED SCABERS ON THE STALK. WHEN YOUNG THESE SCABERS MAY BE A BIT PALE BUT THEY DARKEN WITH AGE. THESE MUSHROOMS ARE USUALLY TALL AND ELEGANT. ALL LECCINUMS ARE EDIBLE.

QUICK LOOK AT ALBERTA LECCINUMS:

ORANGE CAPPED LECCINUMS:

- **LECCINUM BORELAE** - OFTEN THE EARLIEST OF THE LECCINUM. STALK IS MORE MASSIVE AND IT HAS NO GREEN TINGES ON IT. WHEN CUT IT SLOWLY TURNS LIGHT PINK INTO A PURPLISH GRAY.
- **LECCINUM INSIGNE** - HAS GREEN TINGES AROUND THE BASE OF THE STALK, OCCASIONALLY AROUND CAP MARGINS AS WELL. WHEN CUT IT QUICKLY DISCOLORS TO MAUVE AND GRAY.
- **LECCINUM FIBRULLOSUM** - ONLY ORANGE CAPPED LECCINUM FOUND EXCLUSIVELY WITH SPRUCE & PINE. THE CAP IS A DARKER RED/ORANGE WITH A FELTY TEXTURE. MINOR DISCOLORATION WHEN CUT.

BROWN CAPPED LECCINUMS:

- **LECCINUM SNELLII** - DARK BROWN CAP, FINE SCABERS ON STALK. FLESH IS WHITE WITH MINOR DISCOLORATION.
- **LECCINUM SCABRUM** - CAP IS BROWN TO GRAY BROWN. DARK BROWN SCABERS ON STALK. FLESH IS WHITE WITH MINOR DISCOLORATION.

LIGHT COLORED CAPPED LECCINUMS:

- **LECCINUM HOLOPUS** - PALE WHITE CAP WITH OCCASIONAL PINK BLUSHING. FINE DARK ORNAMENTATION OF STALK ENLARGING AT BASE. FLESH IS WHITE WITH MINOR PINKISH DISCOLORATION. MORE ASSOCIATED WITH CONIFERS.
- **LECCINUM NIVEUM** - IVORY WHITE TO LIGHT GRAY CAP. STALK IS WHITE WITH COARSE DARK ORNAMENTATION. FLESH IS WHITE & TUBES SLOWLY TURN PINK TO GRAY.
- **LECCINUM OCHRACEUM** - OCHRE/YELLOW FINE FELTY CAP, OFTEN CRACKED. TUBES DISCOLOUR ORANGY IN AGE. FINE BLACK ORNAMENTATION ON STALK.

SUILLUS

THE SECOND GROUP TO ELIMINATE IS THE SUILLI AND THE CLOSELY RELATED FUSCOBOLETINUS. THESE ARE THE MOST ABUNDANT BOLETES WE FIND IN THE FOREST MOST OFTEN ASSOCIATED WITH CONIFERS.

WE LOOK TO THE STALK FOR IDENTIFICATION CLUES AS WELL AS THE CAP. SUILLUS DO NOT HAVE SCABERS NOR DO THEY HAVE THE TALL ELEGANT SHAPE OF LECCINUMS. MOST SUILLUS HAVE VEILS OR RING REMNANTS OR ELSE THEY HAVE GLANDULAR DOTS ON THE STALK. SOME HAVE SLIMY CAPS WHEN NOT DRIED OUT (YOU CAN USUALLY TELL IF THEY WERE SLIMY BY HOW MUCH DEBRIS IS STUCK TO THE CAP). ALL SUILLUS ARE EDIBLE BUT IT IS A CHALLENGE TO GET ALL OF THEM TO TASTE GOOD.

QUICK LOOK AT ALBERTA SUILLUS:

WITH A RING OR VEIL

-OFTEN THE RING IS GELATINOUS AND DISAPPEARS WITH AGE LEAVING A SLIGHT RING STAINED BROWN WITH SPORES:

- **SUILLUS SUBOLIVACEUS** - BROAD RING WITH A YELLOW STALK AND GLANDULAR DOTS. YELLOW TO OLIVE BROWN CAP WHICH IS STICKY.
- **SUILLUS UMBONATUS** - GELATINOUS RING WHICH DISAPPEARS IN AGE. THE CAP HAS A KNOB AND IS COLOURED A PALE GREENISH TO LIGHT BROWN.
- **SUILLUS LAKEI** - RED FIBRES ON AN ORANGE BROWN STICKY CAP. BROAD WOOLLY RING ON A YELLOW STALK WITH GLANDULAR DOTS. BELOW THE RING THE YELLOW STALK TURNS REDDISH BROWN ON HANDLING.
- **SUILLUS CAVIPES** - CAP IS FELTY RED BROWN. THE RING IS SLIGHT AND DISAPPEARING. THE DEFINITIVE FEATURE IS THE HOLLOW STALK. GET TO KNOW THIS ONE, AS IT IS THE BEST EDIBLE OF ALL THE SUILLUS. GROWING IN ASSOCIATION WITH LARCH OR TAMARACK.
- **SUILLUS GREVELLEI** - MOST COLOURFUL OF THE SUILLUS. VERY SLIMY CAP WHICH IS BRIGHT REDDISH ORANGE. RING IS VERY PRONOUNCED WITH A SHORT YELLOW STALK, NO DOTS. FLESH IS BRIGHT YELLOW.
- **SUILLUS LUTEUS** - VERY STICKY BROWN SMOOTH CAP. RING IS STICKY WITH A YELLOW STALK WITH GLANDULAR DOTS ABOVE THE RING, WHITISH WITH PURPLEY STREAKS BELOW THE STALK. NOT VERY COMMON IN ALBERTA.

NO RING OR VEIL:

- **SUILLUS TOMENTOSUS** - MOST COMMON OF OUR SUILLUS. CAP IS YELLOW WITH BROWNY VISIBLE HAIRS. THESE HAIRS LAY DOWN AFTER RAIN LOOKING LIKE SHORT STREAKS OR LONG DOTS ON CAP. STALK IS YELLOW WITH BROWN GLANDULAR DOTS. YELLOW FLESH QUICKLY STAINS BLUE GREEN FADING TO A BLUISH GRAY.
- **SUILLUS SUBVARIEGATUS** - TALLEST OF OUR SUILLUS. SMOOTH VISCID ORANGE BROWN CAP. TALL STALK HAS NOT GLANDULAR DOTS OR VEIL. NOT VERY COMMON IN ALBERTA. FOUND IN PINE WOODS.
- **SUILLUS GRANULATUS** - STICK SMOOTH CAP, CINNAMON BROWN TO YELLOW BROWN. SHORT WHITE STALK, SOMETIMES YELLOWISH AT TOP WITH GLANDULAR DOTS.
- **SUILLUS ALBIVELATUS** - STICKY YELLOW BROWN CAP. STALK YELLOWISH AT TOP & WHITE AT BOTTOM. NO GLANDULAR DOTS.
- **SUILLUS BRIVIPES** - VERY SHORT STALK WITH NO DOTS. SMOOTH STICK REDDISH BROWN CAP. STALK WHITE TO PALE YELLOW. FLESH UNCHANGING PALE YELLOW.

FUSCOBOLETINUS

THE FUSCOBOLETINUS ARE AN OFF SHOOT OF SUILLUS. THESE MUSHROOMS HAVE LARGER PORES, A DARKER SPORE PRINT THAN SUILLUS AND HAVE A VEIL WITH NO GLANDULAR DOTS. USUALLY FOUND WITH TAMARACK IN BOGS. NOT HIGHLY RATED AS AN EDIBLE. IN SOME PUBLICATIONS IT IS INCLUDED WITH SUILLUS. IN 20 YEARS OF PICKING I HAVE ONLY FOUND FUSCOBOLETINUS ON ONE OCCASION, A FUSCOBOLETINUS SPECTABILIS. IF YOU ABSOLUTELY CAN'T FIGURE OUT WHAT SUILLUS YOU MAY HAVE, THEN CONSIDER THAT IT MAY BE A FUSCOBOLETINUS.

QUICK LOOK AT ALBERTA FUSCOBOLETINUS:

- FUSCOBOLETINUS SPECTABILIS - BRIGHT RED TO RED BROWN CAP WITH DARK BROWN SCALES. FINE VALE DARK FROM SPORES. LOOKS LIKE SUILLUS GREVELLEI BUT IS NOT SLIMY OR SUILLUS CAPVIPES BUT WITH NO HOLLOW STALK. STALK IS DARK RED, YELLOWISH AT TOP. GROWING UNDER TAMARACK.
- FUSCOBOLETINUS SEROTINUS - BROWN CAP WITH OLIVE BROWN TINGES. FINE WHITE VALE TURNING BROWN FROM SPORES. STALK IS WHITE TO YELLOWISH OLIVE BROWN, GREENISH AT BASE.
- FUSCOBOLETINUS AERUGINASCENS - PALE CREAMY YELLOW CAP WITH GRAY GREEN TINTS, COVERED WITH DARKER BROWNISH TO GREENISH SCALES. NO ANNULUS OR VEIL. STALK IS CREAMY TO BROWNISH WITH GRAY GREEN TINTS. STALK FLESH IS WHITE WITH YELLOW IN BASE. GROWING UNDER TAMARACK.

BOLETUS

IF THE MUSHROOM YOU HAVE FOUND IS NOT A LECCINUM, SUILLUS OR A FUSCOBOLETINUS THEN YOU PROBABLY HAVE A BOLETUS. BOLETES HAVE NO RING AND USUALLY HAVE A THICK STURDY STALK WITH AN EMBOSSED FINE NETTING.

QUICK LOOK AT ALBERTA BOLETUS:

- **BOLETUS EDULIS** - ONE OF THE MOST HIGHLY RATED EDIBLE MUSHROOMS. A LARGE MUSHROOM EVEN IN THE BUTTON STAGE. CAP HAS VARIOUS SHADES OF REDDISH BROWN TO PALE BROWN. THE PORES START OUT WHITISH THEN CHANGE TO GREENISH YELLOW. THE STALK IS MASSIVE AND OFTEN BULBOUS. THE NETTED RETICULATION ON THE STALK IS APPARENT ESPECIALLY IN YOUNGER SPECIMENS. THE FLESH STAYS WHITE THROUGHOUT THE COOKING OR DRYING PROCESS. IN SPITE OF THE VARIABILITY OF BOTH CAP COLOUR & STALK SHAPE & SIZE THIS IS A HARD MUSHROOM TO MISIDENTIFY. THERE IS A VARIETY CALLED BOLTEUS EDULIS var. AESTIVALIS WHICH HAS A LIGHTER ORANGE BROWN CAP AND STALK WITH BROWN STAINS ON IT.
- **BOLETUS ZELLERI** - DARKER BROWN CAP, PORES BRIGHT YELLOWISH GREEN, CAN BRUISE A BIT BLUE. STALK IS OFF WHITE AND CAN APPEAR TO BE QUITE RED DUE TO REDDISH HAIRS. FLESH IS OFF WHITE TO YELLOW.
- **BOLETUS PULCHERIMUS** - LARGE MUSHROOM WITH CAP WHICH IS DEEP RED BROWN. THE PORES ARE BLOOD RED, YELLOW TUBES AS WELL AS FLESH QUICKLY TURNING BLUE GREEN. STALK HAS RED TO ORANGE RETICULATIONS ON IT. THIS MUSHROOM IS POISONOUS.
- **BOLETUS SUBTOMENTOSUS** - CAP IS BROWN WITH THE CAP SKIN CRACKING INTO SMALL SCALES. STALK IS YELLOWISH BROWN WITH THE NETTING IS AT THE TOP OF THE STALK. FLESH IS PALE WHITE TO YELLOW.
- **BOLETUS PIPERATUS** - THIS IS A SMALLER MUSHROOM THAN OTHER BOLETES. THE CAP IS MEDIUM RUSTY TO RED BROWN. STALK IS TALL AND SLENDER COLOURED LIKE THE STALK. THE PORES AS WELL AS SPORES ARE RED BROWN. THE GIVE AWAY IS THE VERY PEPPERY TASTE. THIS MUSHROOM IS MORE LIKE A CROSS BETWEEN A BOLETE & A SUILLUS. MYCOLOGISTS HAVE GIVEN IT ITS OWN GENUS "CHALCIPORUS".