

RUSSULA DESCRIPTIONS (4/14/19)

By Dianna Smith
www.fungikingdom.net

WHITE CAPS

Russula albida Peck

White small russula, pale yellow center, viscid smooth cap with faintly striate margin. Gills are pale yellow-orange, dense, some are short, some fork near stem. Stipe is white and spongy changing to gray. Base is wider than apex. Found with conifers and in mixed woods. Taste is mild to slightly bitter.

Russula albidula Peck. *Russula albidula* is one of a few white russulas that can be found along trails or other disturbed areas in northeastern mixed or deciduous woods in summer and fall. It most often associates with oak. It has a plain white smooth, viscid cap with a faintly striate margin that ages yellowish. Gills are white, close and some fork. The stem is white and smooth with downy mycelia at the base. The spore print is pale cream to yellow. The taste is very acrid. In his book, *Mushrooms Demystified*, David Arora calls it the 'Boring White Russula'. With mixed hardwoods and conifers. Fruits summer and fall. Acrid taste.

Russula brevipes* var. *acrior. 'Stubby Short-footed Russula'. Like var. *brevipes* except for faint blue-green gill color, especially at top of stipe where tint may appear as a colored apical ring. More acrid than var. *brevipes*. Under pines or in mixed woods.

Russula brevipes* var. *brevipes Peck. 'Short-footed Russula'. Fairly large white cap with a pellicle that resists peeling. White crowded attached gills that stain brown. Short, squat stipe. Frequently bearing forest debris. Found in coniferous or mixed woods under pine. 'Mushrumps' under leaves. Mild to somewhat acrid (slowly). Inedible. Prime host of *Hypomyces lactifluorum*, the 'Lobster Mushroom'. Is often confused with white *Lactarius* species, such as *Lactarius deceptivus*, but unlike *Lactarius*, it does not exude latex.

Russula perlactea M. Lloydia. White to cream cap, sometimes with brownish center, somewhat viscid when young, smooth margin; white subdistant gills. Extremely acrid taste. Inedible. Common from NY south. Found in sandy soils beneath pine and oak.

Russula polyphylla (Peck). 'Many Gills'. Large white russula becomes funnel-shaped and ages pinkish-brown with scaly cap center. Mushroom stains reddish-brown when bruised. Not common. In mixed woods in n.e. Not edible (alkaline odor).

WHITE RUSSULAS TURNING RED, RED then BLACK, BLACK

Russula adusta (Pers.) Fr. Burnt white cap. Flesh turns pinkish (not red or vinaceous-red) before blackish on bruising. Found beneath pine and spruce in sandy woodland.

Russula albonigra (Krom.) Fries. 'White to Black Russula'. White russula that blackens quickly with no red intermediate stage. Crowded, narrow gills maturing black.

Russula densifolia (Secretan) Gilllet. 'Densely-gilled, Blushing Russula'. White smooth velvety convex cap, firm and small becoming flat to slightly funnel-shaped with a depressed center. More petite than ***Russula dissimulans***, but like it, it reddens before quickly blackening when flesh is damaged or cut. Gills are initially white and close to crowded. They are thinner, narrower and closer than is the case with ***R. dissimulans***. Mycorrhizal with conifers and hardwoods. Acrid taste. Inedible.

Russula dissimulans Shaffer. *Russula dissimulans* is similar to ***Russula densifolia*** in that both are initially white, bruise red, then gray and finally black. However, ***Russula dissimulans*** is a much larger mushroom with somewhat distant, broader, thick gills and a thinner cuticle, which is difficult to peel. It is mycorrhizal with hardwoods and conifers and can be found growing alone, in groups or scattered in summer and autumn. Sometimes called ***R. nigricans*** a European species.

Russula michiganensis Schaffer. Initially it is white and has a convex shape which becomes gray-brown, flat and then vase-shaped with maturity. Its whitish gills are subdecurrent, very close, narrow and blacken with age. It has also many short gills. The stipe is stubby, firm and white to brown and reddens then blackens with

bruising and time. The spore print is white. The taste is slowly acidic. It is relatively uncommon. It can be found associated with oaks from July through September. Not edible.

COLORED RUSSULAS THAT TURN GRAY TO BLACK

Russula albida Pale orange-yellow, viscid smooth cap with faintly striate margin. Gills are pale yellow-orange, dense, some are short, some fork near stem. Stipe is white and spongy changing to gray. Base is wider than apex. Taste is mild to slightly bitter.

Russula claroflava Grove. 'Bright Yellow Swamp Russula'. Shiny, sometimes sticky but usually dry, yellow to yellow-ochre cap with a striate margin and depressed center. Cuticle peels halfway to center. Close, narrow white gills and stipe. Grays on bruising and aging. White stipe. Under birch, aspen and conifers in swampy ground in moss in summer and fall. Mild to somewhat hot. Sometimes has a fruity odor. Edible after cooking.

Russula decolorans Fries. Adnate orangey-red cuticle fading with maturity, peeling partially to 1/3 of radius. Close, broad, attached gills are pale yellow. Stem is white. Spores cream to pale ochre. Like ***R. rubescens***, flesh DISCOLORS gray-black when cut, handled or bruised. Found in swampy pine woodlands. Mild to slightly acrid taste.

Russula fucosa Burl. Small 1-4 cm to medium 4-10 cm. Dry, pruinose red cap, cuticle peels about ½. , cream gills and cream to yellow-ochre spore print, white stipe that turns brownish with handling. Grays weakly. Common in mixed woods in northeast. Fishy odor when mature. Acrid to mild taste. Edible.

Russula ochroleuca Yellow orange cuticle. Flesh turns gray with handling. Taste is peppery and hot.

Russula rubescens Beardslee. Red cap, paler margin. Close to crowded gills. White stem. Flesh first reddens, then grays and blackens (like ***R. decolorans***, ***R. dissimulans***, ***R. nigricans*** & ***R. densifolia***). Summer and autumn fruiting. Inedible.

FOETID RUSSULAS

The foetid, or rotten-smelling russulas (of which there are a surprisingly number), many of which have varying combinations of odors that include maraschino cherries, marzipan, almonds, or benzaldehyde that becomes oilier and foul with maturity.

Russula amoenolens

It has a brownish oily-viscid smooth ochraceous-yellow-brownish splotchy cap with a darker center, and a bumpy, striate margin. Gills are attached, broad, pale yellowish, close to subdistant and stain or discolor brown. Its odor is initially reminiscent of maraschino cherries or almonds, but later turns to strongly spermatic. It can be found with both hardwoods and conifers in summer and autumn. Taste is bitter or acrid and is rotten smelling, especially in age. Inedible.

Russula foetentula Peck. The cap of *Russula foetentula* is viscid and orange-brown to yellow-brown. Initially the margin is inrolled but once expanded it becomes lined. It is relatively easy to peel at least to the depressed center of the cap. The attached gills are whitish-yellow and discolor brownish. The smooth white stem discolors brownish, particularly at the base. Spore print is cream to light yellowish. This mycorrhizal mushroom can be found growing under hardwoods and conifers in summer and autumn. Inedible.

Russula fragrantissima 'Very Fragrant Russula'. Robust ochre-yellow-brown, viscid cap, SKIN PEELS back. STAINS BROWN. Marzipan odor. Brownish-orange tacky cap with yellowish bloom on margin of younger specimens and a shallow central depression and striate margin on older ones. Cap cuticle peels at least half-way. Gills close, cream colored with red specks developing as the fruiting body matures. White stem bruises brownish. Mycorrhizal with oaks. Although the odor is initially pleasant if strong, ***R. fragrantissima*** is not considered palatable due to its oily-acrid taste.

Russula granulata Peck. It looks quite similar to ***Russula grata*** (***R. laurocerasi***) and ***Russula fragrantissima***. The main obvious difference is that there are small crusty granules on its tawny-colored cap, especially on the darker sunken disc of a fully expanded cap. Like the other two, it has a tuberculate-sulcate margin. Its close, attached to slightly decurrent off-white gills become brown-spotted. The whitish stem tapers at the base and discolors brownish. It can be found in mixed forests in summer. This mushroom tastes acrid and oily, has a disagreeable odor and is not considered edible.

Russula grata (***Russula laurocerasi***) Britzelm. 'Bitter Almond-scented Russula'. Pale honey-brown to yellow-ochre convex cap becoming flat with deeply (long) STRIATE margin and a central depression. Cap slimy when

wet and typically emerges from the ground with debris on it. Attached gills cream to dirty yellowish, broad, moderately close and stain brown with age. Light cream spore print. Stipe is often long, even, firm and pale whitish-yellowish staining brown near the base. Flesh is white. Spores are cream-ochre. Found primarily under hardwoods in summer and autumn. Color of cap is similar to *R. fragrantissima*, but *R. grata* is smaller. Smells of bitter almonds or marzipan (benzaldehyde). Later smells foetid. Extremely bitter taste. Inedible.

Russula mutabilis Murrill Brownish-orange tacky cap with yellowish bloom on margin of younger specimens and a central depression and striate margin on older ones. Cap cuticle peels at least half-way. Gill close, cream colored with red specks developing as the fruiting body matures. Yellow-orange stem (except top third of stem is whitish). Note: It is the only foetid group russula with an orange-brown cap and a yellowish stem). Stipe bruises reddish from base upward. Mycorrhizal with oaks.

Russula pectinatoides Peck. Another foetid mushroom that looks very much like many others in the foetid group. It has a light brown mixed with pale yellow fragile, viscid cap that becomes depressed and vase-shaped with maturity. It develops pinkish-brown spots on its bumpy tuberculate-striate margin. The cuticle peels about half-way to the disc. The cream to yellowish gills are slightly decurrent and are forked at the stem apex. The stem is white to pale yellow, tapered at the base, and discolors yellowish-brown with age. It initially smells faintly of maraschino cherries, almonds or benzaldehyde, but the odor becomes unpleasantly foul with age. Spores are whitish-cream. It can be found in hardwood forests inhabited with oak, beech and hickory from July through September. Inedible. ***Russula amoenolens*** has a darker and firmer gray-brown cap and its odor is strongly spermatic.

Russula simillima Peck. Yellow-ochre to tawny smooth, slightly umbonate cap with a moderately tuberculate-striate margin. Pellicle peels ½ way toward center of disc. Gills are cream to yellowish, attached, close and broad. Stem is yellow cream. Flesh cream. Spore print is white. Found with hardwoods containing oak and beech. Faint odor of geraniums. Inedible.

Russula ventricosipes Like other members of the foetid group of russulas, it has the odor of maraschino cherries. Thick, sturdy red stem. Grows in sand dunes and with pines. Gill edges turn orange-red.

Ochre-BROWN, Tan to BROWN

Russula affinis Burl. Cap brown. Cuticle peeling 1/3-3/4 of cap radius. White stem. Cap diameter: 4-10 cm. Spores cream to pale ochre. Acrid, hot or peppery taste

Russula amoenolens Romagn. It has a brownish oily-viscid smooth ochraceous-yellow-brownish splotchy cap with a darker center, and a bumpy, striate margin. Gills are attached, broad, pale yellowish, close to subdistant and stain or discolor brown. Its odor is initially reminiscent of maraschino cherries or almonds, but later turns to strongly spermatic. It can be found with both hardwoods and conifers in summer and autumn. Taste is bitter or acrid and is rotten smelling, especially in age. Inedible.

Russula ballouii. Small ¾ - 2" fragile yellowish or tawny to orange-brown dry convex to flat cap with cracks nearer margin and with a slightly depressed center. Cuticle barely peels if at all. Crowded to close attached cream gills, many short ones along the margin. Gills unchanging with bruising but spotted yellowish-brown from insect damage. Dry stipe paler concolorous with cap and fuller at the patterned base than at the apex. Taste is mild to acrid. More common south and west of the northeast.

Russula brunneola Burlingham Cap color brown to purple-brown, paler when mature, viscid when moist, the cuticle separable about half-way to center, PRUINOUS when young, glabrous; margin involute, soon striate-tuberculate, small to medium: context rather firm, tinged with brownish or slate-violet under the cuticle, otherwise white, mild, the odor none; gills cream-white, becoming yellowish in drying, the edges sometimes tinged with brown, forking near the stipe, close, rather broad; stipe white or tinged with slate-violet, nearly equal, glabrous, spongy: Found under conifers and birch. Mild taste.

Russula bruneoviolacea Spore print is pale cream. Taste is mild.

Russula compacta Frost. 'Firm or Compact Russula'. Solid cap beige becoming cinnamon. Gills whitish becoming brownish with bruising. Whitish stipe also staining brown. Found in mixed woods growing along or scattered in summer and autumn. Common. Fruits even during dry spells. Fishy odor as ages.

Russula consobrina Fr. Cap medium, smooth, brown with olive, amber or gray, paler at margin, which is

initially smooth but becomes striate with maturity. Cuticle peeling 3/4-completely. White stem. Cap diameter: 4-10 cm. Attached gills are broad, close, forked at half-way and white becoming cream to gray-brown with age. Stem white staining gray, especially at the apex, then gray-brown. SP cream to pale ochre. Acrid, hot or peppery taste. Flesh slightly reddens and then discolors gray-brown when cut or bruised'. Found in moss under conifers. Inedible.

Russula crustosa Peck 'Tan Quilted Russula'. Convex to flat with depressed center, whitish to yellowish background covered with a mosaic of orange-tan to olivaceous patches. Cuticle peels 1/3 to 3/4 of radius. Gills attached, close and exhibit some forking. Stipe white. Spore print white to cream. Mild taste. Good edible.

Russula earlei A russula that could be mistaken for a ***Hygrophorus***. Distant, waxy creamy to yellow gills. Cap straw yellow to orangish-yellow. Believed to be a primitive russula.

Russula flavida Bright yellow to egg-yellow cap and stem. White gills. Does not bruise gray like ***Russula claroflava***.

Russula fucosa Dark brown sometimes with orange. Gills are yellow to ochre. In the Xeromphalina group of crab-fish smelling russulas.

Russula lutea (Hus.:Fr) Gray. Cap is yellow to yellow-orange. Gills are ochre. White stem. Smells like apricots.

Russula melliolens Quél. Cap brown, tan, neutral gray, black. Cuticle peeling 1/3-3/4 of cap radius. Cap diameter: 4-10 cm. cream to pale ochre. Mild taste

Russula pectinatoides Peck. Another foetid mushroom that looks very much like many others in the foetid group. It has a light brown mixed with pale yellow fragile, viscid cap that becomes depressed and vase-shaped with maturity. It develops pinkish-brown spots on its bumpy tuberculate-striate margin. The cuticle peels about half-way to the disc. The cream to yellowish gills are slightly decurrent and are forked at the stem apex. The stem is white to pale yellow, tapered at the base, and discolors yellowish-brown with age. It initially smells faintly of maraschino cherries, almonds or benzaldehyde, but the odor becomes unpleasantly foul with age. Spores are whitish-cream. It can be found in hardwood forests inhabited with oak, beech and hickory from July through September. ***Russula amoenolens*** has a darker and firmer gray-brown cap and its odor is strongly spermatic.

Russula tennesseensis Singer. Cap brown, tan, neutral gray, black. Cuticle peeling 1/3-3/4 of cap radius. White stem. Cap diameter: 4-10 cm. Spores cream to pale ochre. Acrid, hot or peppery taste.

YELLOW to YELLOW-OGHRE CAPS

Russula aurantiolutea

Russula aurata

Russula aurea

Russula ballouii. Small 3/4 - 2" fragile yellowish to tawny or orange-brown dry convex to flat cap with cracks nearer margin and with a slightly depressed center. Cuticle barely peels if at all. Crowded to close attached cream gills, many short ones along the margin. Gills unchanging with bruising but spotted yellowish-brown from insect damage. Dry stipe paler concolorous with cap and fuller at the patterned base than at the apex. Taste is mild to acrid. More common south and west of the northeast.

Russula barlae Quel. Medium size, cuticle peels 1/3 to 3/4 of cap radius. Spore print is cream to pale ochre, white stem, acrid, hot or peppery taste.

Russula beardsliei Burl. Medium 4-10 cm. cuticle peels 1/3 of cap radius, white stem, spore print is cream to pale ochre, white stipe, taste is hot, acrid or peppery

Russula burlinghamae Singer. Medium sized cream-yellow to ochre cap that is dry, pruinose with granules at center. Cuticle peels 1/3 to center. White crowded gills often forked. White stem is scurfy and yellow on lower half. Cream colored spores. Mild taste.

Russula claroflava Grove. 'Bright Yellow Swamp Russula'. Shiny, sometimes sticky but usually dry, yellow to yellow-ochre cap with a striate margin and depressed center. Cuticle peels halfway to center. Close, narrow

white gills and stipe. Grays on bruising and aging. White stipe. Under birch, aspen and conifers in swampy ground in moss in summer and fall. Mild to somewhat hot. Sometimes has a fruity odor. Edible after cooking.

Russula decolorans (Fr.:Fr.) Fr. Medium size, cuticle peels 1/3 of radius, cream to pale ochre spore print. Flesh discolors to gray on cutting or bruising. Mild taste

Russula earlei Peck. It could be mistaken for a hygrophorus (waxy cap mushroom). Cap is waxy to the touch, slightly tacky, granular, straw yellow to orangish-yellow. Cuticle does not easily peel. Distant, waxy, wet, broad creamy to yellow attached gills that spot rusty-brown. Stem also feels waxy and is white to yellowish discoloring to rusty-brown. Mycorrhizal with hardwoods, especially beech and oaks. Believed to be a primitive russula.

Russula flaviceps Peck. Medium yellow, ochre or amber cap. Cuticle peels ½ way toward center. White gills becoming yellowish. White stem. Odor of apricot fruit. Mild to somewhat acrid taste.

Russula flavida Frost. Dry, pruinose bright yellow to yellow-orange cap. The cap margin is only faintly lined. Cuticle peels about half-way to center. The attached close gills are initially white, but become cream to light yellowish as the spores mature. Stem also same color, though paler near apex. Doesn't gray like the yellow

Russula claroflava. This beautiful mushroom is common under hardwoods in eastern North America. Mycorrhizal with oaks. Fairly common. Mushroom taste is mild. Edible.

Russula glutinosa Fatto Medium size, cap whitish-yellow cuticle peels 1/3 to 3/4. Cream to pale ochre spore print, Taste is hot, acrid or peppery. White gills and stem brown.

Russula humidicola Burl. Ss. Singer. Small salmon cap with reddish-brown center. Viscid to dry. Close cream colored gills. Spores are pale ochre. Common among hardwoods. Mild taste. White stipe. Taste hot, acrid or peppery.

Russula lutea (Hudson) Fries. 'Yellow Gilled Russula'. Egg-yellow to peachy coral smooth viscid cap. Margin becomes striate with maturity. Fragile. Peels most of way to cap center. Striate margin. White flesh. Saffron yellow gills with yellow edge. Soft white stipe. Can be found under hardwoods in summer and autumn, especially under paper birch. Taste is mild. Older specimens smell like apricots. Edible.

Russula incarnaticeps Murrill Medium size 4-10 cm. Cuticle peels 1/3 to 3/4. Spore print cream to pale ochre. White stem. Mild taste.

Russula ochroleuca Medium ochre-yellow. Pale cream gills. White flesh. White stipe GRAYING with age. Common. In mixed forests. Edible.

Russula ochroleuroides Kauffman. 'Beautiful yellow Russula'. Dry bright and firm yellow cap with pinkish to coral tints developing toward the center. Difficult to peel cuticle. White close to crowded, broad gills becoming cream with maturity and bruising yellowish to brownish to rust brown. Stem is white, but bruises yellowish and then brownish. Found under white oak and beech. Taste is acrid and oily. Its range includes most of eastern North America. The fact that its flesh DOES NOT GREY when sliced separates it from ***Russula claroflava***, and the fact that its STEM is WHITE or at most pale yellowish separates it from the yellow-stemmed ***Russula flavida***.

Russula pectinoides Peck. Medium yellow, straw-ochre or yellow-brown firm but fragile cap with long bumpy striations on the margin. Its thin cuticle peels 1/3 to 3/4 of cap radius and reveals a faintly ash color of the flesh. White to cream colored subdecurrent gills often pull away from the stem where they are often forked at the stem apex. They are shortest at the stipe and broadest along the outer edge. White stipe is dry, stuffed then hollow and tapered toward the base. Cream to pale ochre spore print. Can be found in grass and under hardwoods, especially with oak, hickory and beech during the summer. No odor. Mild to slowly acrid taste.

Russula simillima Peck. Yellow-ochre to tawny smooth, slightly umbonate cap with a moderately tuberculate-striate margin. Pellicle peels ½ way toward center of disc. Gills are cream to yellowish, attached, close and broad. Stem is yellow cream. Flesh cream. Spore print is white. Found with hardwoods containing oak and beech. Faint odor of geraniums.

YELLOW-ORANGE to ORANGE-RED CAP, WHITE STEM

RUSSULA acetolens Rauschert. Small to medium yellow to coral viscid, smooth cap becoming dry with margin furrowing in age. Pellicle peels almost completely. Adnate gills are whitish becoming yellow to dark

ochre, and broad. Stem is white and fragile. Spore print is yellow to dark ochre. Odor slightly fruity or sour like vinegar. Flavor sweet. Found with hardwoods in summer and fall. Edible.

Russula aurea

Russula ballouii Peck. Colored stem (entirely or just a flush). Cap diameter: 4-10 cm. Spores white to palest cream. Acrid, hot or peppery taste

Russula barlae Quelet. Medium sized pale ochre-yellow to pale orange red cap that is yellow in the center, dry, smooth to slightly pruinose with an unstriated margin. Cuticle peels $\frac{3}{4}$ toward center. Crowded gills are pale cream-ochre and frequently brown with maturity. Stem is cream-white and stains with handling especially at the base. Spore print is light ochre-yellow. Found often in mixed woods. Odor of older specimens is fishy or like crabmeat. Mild taste.

Russula bicolor Burl. Copper-red to light yellow-ochre smooth, viscid cap that peels just at margin. Gills are well-spaced and white. Flesh is white and stains brown. Stipe is white. Spore print is white to pale cream. Found in mixed woods. Acrid taste.

Russula crassotunicata Singer. Cap yellow, ochre, orange. Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius. White stem. Cap diameter: 4-10 cm. Spores white to palest cream. Acrid, hot or peppery taste. Flesh discolors when cut or bruised

Russula decolorans Fries. Adnate orangy cuticle fading with maturity, peeling partially to $\frac{1}{3}$ of radius. Close, broad, attached gills are white, as is the stem. Spores cream to pale ochre. Like ***R. rubescens***, flesh DISCOLORS gray-black when cut, handled or bruised. Found in swampy pine woodlands. Mild to slightly acrid taste.

Russula earlei Peck. A russula that could be mistaken for a *Hygrophorus*. Distant, waxy creamy to yellow gills. Cap straw yellow to orangish-yellow. Cuticle peels about $\frac{1}{3}$ of cap radius. White stem. White to pale cream spores. Mild taste. Believed to be a primitive russula.

Russula fellea Fr. Cap yellow, ochre, orange. Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius. Colored stem (entirely or just a flush). Cap diameter: 4-10 cm. Spores white to palest cream. Acrid, hot or peppery taste

Russula integra (L.) Fries

Russula lutea (Hudson) Fries. 'Yellow Gilled Russula'. Egg-yellow to peachy coral smooth viscid cap. Margin becomes striate with maturity. Fragile. Peels most of way to cap center. Striate margin. White flesh. Saffron yellow gills with yellow edge. Soft white stipe. Can be found under hardwoods in summer and autumn, especially under paper birch. Taste is mild. Older specimens smell like apricots. Edible.

Russula ochroleuciformis Murrill. Cap yellow, ochre, orange. Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius. White stem. Cap diameter: 4-10 cm. Spores white to palest cream. Mild taste

Russula ochroleucoides Kauffman. 'Beautiful yellow Russula'. Dry bright and firm yellow cap with pinkish to coral tints developing toward the center. Difficult to peel cuticle, but may peel $\frac{1}{3}$. White close to crowded, broad gills becoming cream with maturity and bruising yellowish to brownish to rust brown. Stem is white, but bruises yellowish and then brownish. Spore color is white to pale cream. Found under white oak and beech. Taste is bitterly acrid and oily. Its range includes most of eastern North America. The fact that its flesh DOES NOT GREY when sliced separates it from ***Russula claroflava***, and the fact that its STEM is WHITE or at most pale yellowish separates it from the yellow-stemmed ***Russula flavida***.

Russula paludosa Britzelm. Large between 10-20 cm. Cuticle peels $\frac{1}{3}$ to $\frac{3}{4}$ of cap radius, spore print is cream to pale ochre, white stipe, mild taste

Russula polycystis Singer - Cap diameter: 4-10 cm. Cap yellow, ochre, orange. Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius. White stem. Spores white to palest cream. Acrid, hot or peppery taste.

Russula purpureomaculata Shaffer - Cap diameter: 4-10 cm. Cap yellow, ochre, orange. Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius. Colored stem (entirely or just a flush). Spores white to palest cream. Mild taste.

Russula raoultii Quél. - Cap diameter: 4-10 cm. Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius. White stem. Spores white to palest cream. Acrid, hot or peppery taste

Russula stricta Murrill - Cap diameter: 4-10 cm. Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius. White stem. Spores white to palest cream. Mild taste

Russula subflava Murrill - Cap diameter: 4-10 cm. Cap yellow, ochre, orange. Cuticle peeling 3/4-completely. White stem

Russula subsulphurea Murrill - Cap diameter: 4-10 cm. Cuticle peeling 3/4-completely. White stem. Spores white to palest cream. Mild taste.

PINKISH-CORAL to Orange-Blood RED CAPS

Russula abietina Peck*Medium, fragile, viscid, pale ochre-yellow to orange-red cap that is paler in the center with an even margin. Pellicle peels $\frac{3}{4}$ to center of cap. Attached gills are crowded, pale cream-ochre yellow and brown with age. Stem is cream-white, but stains at base with handling. Yellow-ochre spore print. Under conifers and in mixed woods in summer and fall.

Russula betularum Hora. Pileus only at first dark pink-red, quickly discolors to grey lilac-pink, pink spotted yellow, yellowish; quickly plane to shallowly concave; flesh in the cap quite thick, fragile; margin obtuse, undulating, shortly striated; cuticle viscid and glossy, almost entirely peelable, flesh white under cuticle. Lamellae white; subdistant, rarely with lamellulae; GILLS BROAD AT CAP MARGIN; sinuate. Flesh white; very fragile. Stipe white, BASE ENLARGED, very fragile. White spore print. Found under birch. Has a somewhat HONEYLIKE ODOR; taste stinging hot. It is also a European species that has been confirmed by DNA analysis to be in the northeast.

Russula flavisiccans Bills. Cap is dull pinkish to pinkish-red fading with age to pinkish yellow or orange. Sometimes cracks develop in center. Cuticle doesn't easily peel. White gills bruise brownish-yellow with handling and age. Stipe is white. Taste somewhat bitter and oily. Somewhat like **Russula pulchra**. Mycorrhizal with hardwoods. Found in oak-hickory forests. Bitter tasting.

Russula fucosa Burlingham. *Russula fucosa* is small, dry, pruinose dark red to orange red with yellowish center. Cuticle easily peels $\frac{3}{4}$ th to center. Gills are cream, close, forked at stipe apex. Stipe white or flushed pink. Browns with handling. Slight fishy odor with age or drying. Light yellow-ochre spore print. Associated with hardwoods, especially beech and oak. Flesh turns green with application of FeSo₄. Can be confused with **Russula pseudolepida**, which however, does not brown and is odorless. Flavor good.

Russula paludosa Orange-red fading paler in center, slimy when wet. Attached white gills becoming ochre. Smooth stipe. White spore print.

Russula pulchra Burlingham 'Beautiful Russula'. Cap pinkish coral to peachy orange with white, cream or yellow patches. Dry matt surface, sometimes cracks. STRIATE margin. Gills are white becoming creamy white. STIPE with PINK tinge. Spore print is cream. Can be found in deciduous woods, especially under oak and beech. Mild taste. Similar to **Russula flavisiccans**, which is bitter tasting.

Russula pusilla Peck. Very small reddish to pale orange smooth, viscid cap with short tuberculate-striate cap and darker center. Gills even and white becoming pale ochre. Fragile white stem becomes hollow. Yellow-cream spore print. Found with white pines. Fruity odor. Edible.

Russula roseitincta Murrill. Medium sized yellow-pink and pale orange-yellow cap that is viscid when wet, but granular when dry. Cuticle peels more than half-way to center. Cream gills are close, even and forked at stipe apex. White stem tinged with pale pink. Can be found with hardwoods under oak and beech. Mild taste.

Russula rugulosa Peck. Rose red cap, completely bumpy-wrinkled and fading with age. Peels half-way to center. White stipe, gills broad, creamy-white with a few forking. Found with conifers. Taste mild to somewhat peppery. Often confused with *R. emetica*, which grows in sphagnum moss.

PINKISH-RED to VINACEOUS-PURPLE CAPS

Russula aciculocystis Kauffman, Bills & O.K. Mill., small 1-4 cm. Cuticle peeling 1/3-3/4 of cap radius, Colored stem (entirely or just a flush), SP cream to pale ochre, mild taste.

R. alutacea (Pers) Fr. – Large, dull red to reddish-purple and fading with maturity. Cuticle peels 1/3 to $\frac{3}{4}$ of cap radius. Deep yellow gills. SP yellow to deep ochre-orange, stem flushed with red. Mixed woods. Mild taste. Lookalike is **Russula integra**, which is smaller, lacking ochraceous gills and is more common.

R. ameoenicolor Romagn. Medium 4-10 cm, cuticle peels 1/3 to $\frac{3}{4}$ of cap radius, SP cream to pale ochre, stem flushed, mild taste

Russula aquosa Lilac to cherry red thin-fleshed cap that is sticky when moist and often brownish in the center. Cap is initially convex becoming flat with a depression, margin becomes furrowed and slightly bumpy. The pellicle peels 2/3rds to completely. Fragile stem is white and frequently tinged yellowish, brownish or gray. Flesh white. Gills well-spaced, off-white. Spore print is creamy white. Common in damp areas with mosses in summer and fall. Taste is somewhat hot. Inedible.

R. badia Quel. Medium 4-10 cm, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, **stem flushed**, acrid, hot or peppery taste

R. borealis Kauffman – medium 4-10 to large 10-20 cm, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, **stem flushed**, mild taste

R. cochisei Fatto – medium 4-10 cm to large 10-20 cm, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, **stem flushed**, mild taste

Russula corallina Burl. – Small (1-4 cm) Pale rose-pink, viscid at first, later dry and pruinose, and depressed at center, breaking up into granules showing cream-white flesh underneath. Cuticle peeling 1/3-3/4 of cap radius. Gills close, white and narrow with rounded ends and forked. Stipe enlarged at apex, white and **faintly flushed with pink**, base tapered, becomes hollow with age. Spores white to palest cream, mild taste becoming acrid.

Russula cystidosa Murrill - – medium 4-10 cm, cuticle peels 1/3 to 3/4, SP cream to pale ochre, taste is mild.

Russula emetica Persoon 'The Sickener', 'Bog Russula'. Causes vomiting. Stipe white, often long. Grows in sphagnum moss. The name **Russula emetica** is frequently applied to any red species. While it is true that most red species are equally 'hot' and may cause gastrointestinal problems if eaten, the chances of any one red russula being **Russula emetica** are relatively small. There are at least 125 species of red russula in the northeast. In many cases, it is impossible to assign an accurate name to a particular find without doing further analysis. Fruity odor. Extremely bitter.

Russula fragilis Fries. 'Fragile Russula'. Small 1-2" diameter thin cap, convex to flat or slightly depressed, viscid when wet, purplish to pinkish or olivaceous center fading to white, roughened striate margin. White, attached, close gills sometimes having slightly serrate edges. Smooth, white fragile stipe is larger at the base than at the apex. Whitish spores print. Found on the ground, often in damp moss, in mixed woods. Extremely acrid taste.

Russula fucosa Burl. Small 1-4 cm to medium 4-10 cm. Dry, pruinose red cap, cuticle peels about 1/2. , cream gills and cream to yellow-ochre spore print, white stipe that turns brownish with handling. Grays weakly. Common in mixed woods in northeast. Fishy odor when mature. Acrid to mild taste. Edible.

R. gracilipes Murrill – medium 4-10 cm., cuticle peels 1/3 to 3/4, SP cream to pale ochre, stem flushed, taste is mild

Russula gracilis Burlingham. Small smooth, viscid when wet lilac-pink cap with gray-green tinge that is darker at the center and paler pink toward the margin. Cuticle peels half-way toward disc. White to cream close gills are equal and broad. Stem is white to pale gray-rose. Spore print is cream. Can be found in damp mixed woodlands in summer and early autumn. Moderately acrid taste. Not edible.

Russula hixsoni Murrill – large 10-20 cm. Cuticle peeling 1/3-3/4 of cap radius, stem flushed, SP cream to pale ochre, mild taste

Russula incarnaticeps Murrill. Medium size. Smooth and somewhat viscid cap colored red to flesh-pink with a striate margin. Cuticle peels 1/2 or more toward center of cap. Gills are white to cream colored with some forking at the base of the stipe. Stem is white and smooth. Cream spore print. Found under hardwoods, especially with oaks.

Russula lepida 'Elegant Russula'

R. luteobasis Peck – medium 4-10 cm, cuticle peels 1/3 to 3/4, SP cream to pale ochre, stem flushed, taste is mild.

Russula mariae Peck. 'Purple-bloom Russula'. Pruinoso, dry reddish-pink to maroon-purple mottled cap. Gills are attached to subdecurrent, narrow, close to subdistant, white becoming dull cream and forked at the stem apex. Stem is white with pink to purple tinges. Spores are pale creamy white. Can be found under hardwoods, especially oak in summer. Mild to barely acrid Taste. Edible.

Russula minutula Velen. – Small 1-4 cm. Cuticle peeling 1/3-3/4 of cap radius, Colored stem (entirely or just a flush), Spores white to palest cream, Mild taste

Russula nigrescentipes Peck – Small 1-4 cm. cuticle peeling 1/3-3/4 of cap radius, Spores, white to palest cream, mild taste, Flesh discolors when cut or bruised

Russula novispora Murrill – Small 1-4 cm. Cuticle peeling 1/3-3/4 of cap radius, Colored stem (entirely or just a flush), Spores white to palest cream, Acrid, hot or peppery taste

Russula olivacea (Schaeff.) Pers. Large 10-20 cm, Cuticle peeling 1/3-3/4 of cap radius, colored or flushed stem Cap diameter: 10-20 cm, SP yellow to deep ochre-orange, mild taste

Russula ornaticeps Burlingham Starts out with a convex purple-pinkish cap that is paler on the disc and it becomes slightly vase-shaped as it matures. With maturity, the margin is somewhat striate. The pruinose cuticle is peelable about half way to the center. The gills are close and white but become spotted with a brownish rusty color along the edge. They are narrower at the stipe and the margin than in between. The stem is white tinged with purple-pink and tapers at the base. The taste is mild to slowly acrid. These can be found in mid-summer under hardwoods.

Russula paludosa Britzelm. – Large 10-20 cm bright red to orange-red. Cuticle peeling 1/3-3/4 of cap radius. Notched yellowish gills. White stem. SP cream to pale ochre. Mixed woods. Hot to mild taste. Lookalike is ***Russula decolorans***, which discolors gray with handling.

Russula parvula Burlingham. Small sized dark violet dry, pruinose cap with nearly black center. White gills. Stipe white but bruises dull violet to red. White spores. Found under spruce. Slowly acrid taste.

Russula peckii (Singer) Kibby and Fatto - Small to medium. Has a viscid to rose-pink to dry cherry red cap that starts out convex to broadly convex and then becomes somewhat depressed with maturity. The cuticle peels half way to the disc. Its attached white gills are minutely fimbriate, which means they have serrated or saw-toothed edges. Sometimes the gill edges are also pink. Spore print is white. It has a white stipe entirely flushed with red to rose-pink dots. It can be found in damp coniferous or mixed woods habitats, often growing gregariously in damp habitats in sphagnum moss in August and September. Taste is mild. **A good edible.**

Russula praeumbonata

Russula praetenuis Murrill – Small 1-4 cm. cuticle peeling 1/3-3/4 of cap radius, Colored stem (entirely or just a flush), Spores white to palest cream, Mild taste

Russula pseudolepida Singer - Medium 4-10 cm. Apple-red to pink-red dry, slightly velvety, often white to yellow-splotched cap with a pellicle that barely peels. Cream to pale yellow-ochre crowded gills, some of which are forked. Spores are deep cream. Stipe white with rose-red tinges especially at the tapered base. Browns with handling. Can be found growing under hardwoods in east. Taste is mild.

R. pseudopeckii Fatto – medium 4-10 cm, cuticle peels 1/3 to 3/4, SP cream to pale ochre, stem flushed, taste is mild

Russula puelleris The type species of subsect. Puellarinae, a group of russulas with a distinctive YELLOW STAINING on STIPE surface; it is a small and fragile fungus with a sulcate margin, common, usually growing in mixed woods. Its purple-red to vinaceous or red-brown cap has a darker center. Cap peels 2/3rd to center. The pale yellow-ochre gills are spaced moderately. The soft white stem stains yellow-ochre. Spore deposit is pale yellow. Can be found under hardwoods and in mixed forests in summer and early autumn. Mild taste. Edible.

R. pulchella Borszczow – medium 4-10 cm, cuticle peels 1/3 to 3/4 of cap radius, SP cream to pale ochre, stem flushed, hot, acrid or peppery taste

R. pulchra Burl. Medium 4-10 cm, cuticle peels 1/3 to 3/4 of cap radius, SP cream to pale ochre, stem flushed, mild taste

Russula pusilla very small species with a red cap that is often darker in the center, white stipe. Found under conifers. Mild taste.

R. queletii Fr. Medium 4-10 cm., cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed, acrid, hot or peppery taste

R. rhodopoda Zvara – medium 4-10 cm, cuticle peels 1/3 to ¾, SP cream to pale ochre, stem flushed, taste is acrid, hot or peppery.

Russula rosea Quelet (**Russula lepida**)

Red to pink cap with a creamy white center, sometimes more so. Cuticle peels ½ toward disc. Light cream close gills are forked at stem apex. Stem is very fragile, white and powdery. Found under hardwoods. White to cream spore print. Has a slightly fruity sweet odor, and mild to bitter taste. Not edible.

Russula roseipes (Secretan) Bresadola. Small rose-red to pink, dry pruinose cap often with pale spots. Cuticle peels half way to disc. Subdistant gills are ochre-yellow. Stipe is white and speckled with rose-pink. Spores are ochre-yellow. Can be found under conifers and in mixed woods. Mild taste.

Russula rubellipes Fatto – small 1-4 cm. Cuticle peeling 1/3-3/4 of cap radius, Colored stem (entirely or just a flush), SP cream to pale ochre, mild taste

Russula rubescens Red cap. Crowded broad white gills and stem. Flesh first reddens, then grays and blackens (like *R. decolorans*, *R. dissimulans*, *R. nigricans* & *R. densifolia*).

R. rubriochracea Murrill – medium 4-10 cm, cuticle peels 1/3 to ¾ of cap radius, SP yellow to deep ochre-orange, stem flushed, acrid, hot or peppery taste

Russula rugulosa Peck - Rose red cap, completely bumpy-wrinkled and fading with age. Peels half-way to center. White stipe, gills broad, creamy-white with a few forking. Found with conifers. Taste mild to somewhat peppery. Often confused with *R. emetica*, which grows in sphagnum moss.

Russula sanguinaria 'Rosy RUSSULA'. Initially smooth, bright to dark red convex viscid cap becoming pale pink often with white or yellow spots, uplifted, wavy, and striate with maturity. Flesh is white and unchanging. Attached gills are broad, close to subdistant and white changing to cream or yellow with no discoloration due to handling. Stem is rose colored, paler at apex, stuffed, becoming hollow. Found under pines in summer and fall. Acrid taste.

Russula sanguinea

Russula sericionitens Kauffman. It has a smooth shiny purple-wine-red cap with a depressed darker center. The cuticle peels back nearly 3/4 to the disc. Gills are close, white to cream-white, somewhat broad and often forked at the stem apex. The flesh is white and does not bruise a color. Spore print is white. These can be found in mixed woods in damp areas in summer and early fall. Not particularly common. Edible.

Russula silvicola Looks similar to *R. emetica* and over another 100 or so red russulas. Shiny, viscid **bright rose-red** smooth cap that fades to pink often with a splash of **yellow** spots in age. Cuticle peels 3/4. Flesh is white and unchanging. Close moderately broad white gills. White dry stuffed stem. Spore print is white. Terrestrial in deciduous to mixed woods in summer and fall. Faintly fruity odor. Strongly acrid taste. Possibly toxic. (Lookalike is *Russula emetica*, which may have orange tint and grows in damp sphagnum moss under conifers).

Russula sphagnophila Kauffman – Small 1-4 cm. Cuticle peeling 1/3-3/4 of cap radius, SP cream to pale ochre, mild taste

Russula squalida One of the 'shrimp russulas'. Colors from olive and brown to pinks and purples. White to cream gills becoming darker with age. Gills and stem bruising yellowish, then brown. Fish or shrimp-like smell, especially as it dries.

Russula subpunctata Kauffman - Has a **reddish-pink** convex cap mottled with white spots, especially in the center where it becomes depressed in age. The cap skin is barely removable. The flesh is white and the taste is acrid. The white then pale cream gills are broadly attached, shorter at both ends, and closely spaced. The gill edge is often reddish. Spore print is cream to pale yellow. **Russula subpunctata** can be found in summer and early autumn in deciduous forests, especially under oak, beech or hickory. Taste is immediately acrid. Not edible.

R. subtenuiceps Fatto – medium 4-10 cm, cuticle peels 1/3 to ¾ of cap radius, SP yellow to deep ochre-orange, stem flushed, acrid, hot, peppery taste

Russula subtilis Burl. This delicate russula is relatively small. Cap is initially convex dull, pinkish to pinkish-violet, often slightly darker in the depressed center of fully expanded cap. Margin is usually finely granular. Gills are white. Gills are white, attached, close to evenly spaced. Spore print is also white. Stem is flushed

with color of cap, although apex of stem is white. Taste becomes slowly acrid. Can be found in mixed or in hardwood forests in summer and autumn.

R. tenuiceps Kauffman – medium 4-10 cm, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed, acrid, hot, peppery taste

R. tuberculata Murrill – medium 4-10, cuticle peels 1/3 to 3/4, SP cream to pale ochre, stem flushed, taste is mild

Russula uncialis Peck is a small 1 inch diameter, fragile mushroom with a velvety blood red to rose cap with a slightly darker disc and a cuticle that begins to show cracks as it matures. The white gills are broadly attached, close and sometimes forked at the stem apex and are somewhat serrate. The spore print is white. The stem is white flushed with rose. No parts stain. ***Russula uncialis*** is mycorrhizal with hardwoods, particularly oak and beech. It can be found in summer and early autumn. Mild taste. Edible. Lookalikes include the tiny ***Russula pusilla***; ***Russula peckii***, which has crenulate gill edges; ***Russula roseipes***, with its ochre gills and lack of a darker cap disc; ***Russula lepida***, which is much firmer and larger.

Russula variata Banning - Can be confused with ***Russula cyanoxantha***, another good edible. The later has fewer forked gills.

Russula vinacea (R. krombholzii) Burlingham 'Blackish-red Russula', 'Black & Purple Russula'. Smooth non-striate, dark reddish-purple cap dry cap splashed with ochre and having slightly depressed nearly black center. White to cream gills are closely spaced and somewhat broad. Short white stipe bruises brown-gray with maturity. Spores pure white. Mycorrhizal with hardwoods, especially oak and hickory. Faint scent of apples. It is often the first *Russula* species to appear.

Russula xerampelina 'Shellfish-scented Russula/Shrimp Russula'. Robust reddish-purple cap with purple, pink, olive or brown tones sometimes with yellow splotches. Cap convex becoming flat with a depressed center. Margin is faintly striate and fragile. Attached broad cream to yellow gills. Stipe dry, smooth, white with pinkish to purple flushes, bruising ochre-olive to brown, and enlarged toward base. Yellowish spore print. Flesh white with a shellfish odor of crab or shrimp. Mild taste. Edible.

GREEN & Variegated CAPS

Russula aeruginea Fries. This russula has dull pale grayish-green smooth convex cap, frequently with rust colored spots that becomes flat with a central velvety and tacky depression with maturity. Margin becomes faintly grooved. The cuticle peels about half-way to the central disc. Gills are white becoming dingy cream, forked at the stem, narrowly attached to free, narrow and smaller at the stem than the margin. They become spotted with rust-brown discolorations. Stipe is stuffed, smooth, even and white, but also develops brownish spots. Spores are creamy white. Common in NA in mixed woods, especially under birch and oaks in summer and autumn. Mild Taste. Edible.

Russula cicatricata Romagn. Cap diameter: 4-10 cm. Cuticle peeling 1/3-3/4 of cap radius. White stem. Spores cream to pale ochre. Mild taste. Flesh discolors when cut or bruised

Russula cyanoxantha (Schaeff) Fr. It has a variably colored firm convex cap with dark purples, pinks and olivaceous and yellowish tints becoming flat to sub-vase-shaped and depressed in a paler center. The white to pale yellowish gills are close to subdistant, moderately broad, well-spaced, narrower at the stem and greasy rather than fragile. They often fork at the stem apex. Stipe is white. Spores are white. Can be found in hardwood or mixed forests. Similar to ***Russula variata***, except taste is mild and there are fewer forking gills. Edible.

Russula elaeodes (Bres.) Romagnesi ex Bon - Medium smooth, glabrous olive-green to olive-ochre cap, paler in center. Cuticle peels 1/3 radius of cap. Gills cream to pale yellow, narrow, close and inter-veined. Stipe is white and discolors readily when cut or bruised to yellow-brown. Base is faintly tinted reddish. Odor of fish. Spore print is cream to pale ochre. Mild taste. Edible.

Russula gracilis Smooth, viscid greenish cap, sometimes marbled with rose, lavender tints on the margin, which becomes striate in age. Cuticle peels about 1/2 of cap radius. White gills are close and broad and become cream to light yellow. The spore print is cream to yellowish. The stipe is white and fragile. Can be found in summer and autumn in mixed forests.

Russula grisea Fr. - Cap diameter: 4-10 cm. Cuticle peeling 1/3-3/4 of cap radius, White stem. Spores cream to pale ochre. Mild taste

Russula heterophylla Fries - Greenish cap often with shades of brown and ochre, close, broad attached cream gills, forked both at and near white stem and many short short ones.. Spore print is white. Found with hardwoods in summer and autumn. Taste is mild. Edible. (May need new name: European description includes white gills)

Russula ionochlora Romangnesi - 'Oil Slick Russula'. A beautiful mushroom that can exhibit a mix of pinks, purples, browns, yellow, greens on the cap. Cuticle peels half-way toward disc. Gills are light cream colored, attached, crowded, fragile and exhibit forking near stem apex. Stem is white, but sometimes has a slight tint of lavender. It typically fruits under beech and oaks. The flesh is acrid when young, but becomes milder as it opens from the button 'stage'. Edible.

Russula modesta Common in s.e., but also found in n.e. Pale-gray-greenish often with brown or purple-tinged dry cap. Forked close gills near stem. Pale yellow spore print. Under hardwoods, especially oaks. Sweet taste. Edible.

Russula parvovirescens 'Green Quilt Russula'. Often called ***Russula virescens***, a European name. Crustose Dry, GREY-GREEN quilted cap, usually darker in the center, with striate margin in older specimens. Sometimes with ochraceous patches on depressed disc. White gills close, fragile. White stem. Edible.

Russula redolens Burlingham 'Parsley-scented Russula'. Redolens' means "emitting a scent." Cap MULTICORED grayish blue-green sometimes with lavender, dry, pruinose cap. STRIATE margin in age. Crowded whitish gills, FORKED. Extremely fragile. Odor of FISH or PARSLEY or CELERY. Smell becomes more pronounced after drying and can persist for years. Can be found in summer under hardwoods.

Russula simulans Burlingham A large mushroom with a smooth, streaky ivy green to mixed pink-purple cap that is sometimes spotted yellow to brownish in the center. Margin stays inrolled into maturity, is usually paler and faintly striate. The cuticle can be peeled back about half-way to the disc. Its close white gills are narrow and fork only near stipe. White stipe tapers toward the base. White flesh. Found with hardwoods in summer. White spore print. Not common. Mild to slightly acrid, more so than its lookalike, ***Russula heterophylla***. Edible.

Russula subgraminicolor Murrill Differs from other green russulas in not having a cracked or crustose cap. Can be fairly large, blue-green to olive-green with a paler striate margin. Fibrillose pellicle becomes smooth with age and peels half-way or more toward the center. Gills are whitish to cream colored, broad, well-spaced and forked at stem apex. Stem is white. Cream to pale yellowish spore print. Can be found under oaks in summer and autumn. Mild taste. Edible.

Russula variata Banning 'Forked-gill Russula'. Variably greenish smooth cap with yellow, purple &/or pink tones, convex to flat with a depressed center that can be viscid when moist; margin wavy or split and sometimes crustose. Firm flesh is white. Its attached to subdecurrent close, narrow white to cream colored gills are conspicuously FORKED gills in many places. They are somewhat greasy and flexible unlike the fragile gills of most other russulas. Stipe is dry, smooth, solid and becomes hollow in age. White spore print. Deciduous & mixed woods, esp. under oak and aspen. Taste is peppery to slowly acrid, but becomes mild with cooking. Edible.

Russula violacea This Russula is often large with a variably colored cap of olive along with reds, purples and browns. The cuticle peels easily about half-way or more to the center of the cap. The yellow gills are well-spaced and sometimes fork at the stem apex. The stuffed stem is even and white flushed with vinaceous-pink and discolors brownish with handling. Spores are yellow. It can be found in mixed woods. Taste is mild.

Russula viridella Peck Light gray-green minutely squamulose near margin dry cap that is smooth and paler in the center or ochraceous. Pellicle peels 1/3 to 3/4 of cap radius. It has close cream-white gills, narrow, thin with some forking and some shot gills, spores are whitish-yellow. It has a white stem, strong odor. Relatively uncommon. Mycorrhizal with conifers, especially hemlock and fir in summer. Rare. Acrid/peppery taste goes away with cooking. Edible.

SHELL-FISH or SHRIMP RUSSULAS (All are mild tasting and edible)

Russula barlae Quelet. Medium sized pale ochre-yellow to pale orange red cap that is yellow in the center, dry, smooth to slightly pruinose with an unstriated margin. Cuticle peels $\frac{3}{4}$ toward center. Crowded gills are pale cream-ochre and frequently brown with maturity. Stem is cream-white and stains with handling especially at the base. Spore print is light ochre-yellow. Found often in mixed woods with oaks. Odor of older specimens is fishy or like crabmeat. Mild taste.

Russula elaeodes greenish to olivaceous cap. Associated with hardwoods.

Russula fagina

Russula fucosa – small, dry, pruinose dark red to orange red with yellowish center. Cuticle easily peels $\frac{3}{4}$ th to center. Gills are cream, close, somewhat forked at stipe apex. Stipe white or flushed pink. Browns with handling. Slight fishy odor with age or drying. Flavor good. Light yellow-ochre spore print. Associated with hardwoods, especially beech and oak. Flesh turns green with application of FeSo₄. Can be confused with ***Russula pseudolepida***, which however, does not brown and is odorless.

Russula graveolens brown to purple-brown cap, Associated with oaks, birches and other hardwoods.

Russula squalida One of the 'shrimp russulas'. Colors from olive and brown to pinks and purples. White to cream gills becoming darker with age. Gills and stem bruising yellowish, then brown. Fish or shrimp-like smell, especially as it dries.

Russula xerampelina 'Shellfish-scented Russula/Shrimp Russula'. Robust reddish-purple cap with purple, pink, olive or brown tones sometimes with yellow splotches. Cap convex becoming flat with a depressed center. Margin is faintly striate and fragile. Attached broad cream to yellow gills. Stipe dry, smooth, white with pinkish to purple flushes, bruising ochre-olive to brown, and enlarged toward base. Yellowish spore print. Flesh white with a shellfish odor of crab or shrimp. Mild taste. Edible.

RED RUSSULAS – small (1-4 cm)

Russula aciculocystis Kauffman, Bills & O.K. Mill., Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius, Colored stem (entirely or just a flush), SP cream to pale ochre, mild taste

Russula corallina Burl. – Pale rose-pink, viscid at first, later dry and pruinose, and depressed at center, breaking up into granules showing cream-white flesh underneath. Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius. Gills close, white and narrow with rounded ends and forked. Stipe enlarged at apex, white and faintly flushed with pink, base tapered, becomes hollow with age. Spores white to palest cream, mild taste becoming acid.

Russula fucosa Burl. - Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius, SP cream to pale ochre, mild taste, flesh discolors when cut or bruised

Russula minutula Velen. - Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius, Colored stem (entirely or just a flush), Spores white to palest cream, Mild taste

Russula nigrescentipes Peck – cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius, Spores, white to palest cream, mild taste, Flesh discolors when cut or bruised

Russula novispora Murrill -Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius, Colored stem (entirely or just a flush), Spores white to palest cream, Acrid, hot or peppery taste

Russula praetenuis Murrill – cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius, Colored stem (entirely or just a flush), Spores white to palest cream, Mild taste

Russula rubellipes Fatto - Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius, Colored stem (entirely or just a flush), SP cream to pale ochre, mild taste

Russula sphagnophila Kauffman - Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius, SP cream to pale ochre, mild taste

Russula uncialis Peck - Cuticle peeling $\frac{1}{3}$ - $\frac{3}{4}$ of cap radius, Colored stem (entirely or just a flush), Spores white to palest cream, mild taste

RUSSULA Medium 4-10 cm

R. alutacea (Pers) Fr. - medium, cuticle peels $\frac{1}{3}$ to $\frac{3}{4}$ of cap radius, SP yellow to deep ochre-orange, stem flushed, mild taste

R. ameoenicolor Romagn. medium, cuticle peels $\frac{1}{3}$ to $\frac{3}{4}$ of cap radius, SP cream to pale ochre, stem flushed, mild taste.

R. badia Quel. medium, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed, acrid, hot or peppery taste.

Russula borealis Kauffman - Cuticle peeling 1/3-3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed

R. cochisei Fatto - medium, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed, mild taste

R. cystidosa Murrill - medium, cuticle peels 1/3 to 3/4, SP cream to pale ochre, taste is mild

R. fucosa Burl. - medium, cuticle peels 1/3 to 3/4 of cap radius, SP cream to pale ochre, flesh *discolors* with handling – weakly greying, hot, acrid or peppery taste

R. gracilipes Murrill – medium, cuticle peels 1/3 to 3/4, SP cream to pale ochre, stem flushed, taste is mild

Russula hixsoni Murrill - Cuticle peeling 1/3-3/4 of cap radius, stem flushed, SP cream to pale ochre, mild taste

R. luteobasis Peck – medium, cuticle peels 1/3 to 3/4, SP cream to pale ochre, stem flushed, taste is mild.

R. mariae Peck - medium, cuticle peels 1/3 to 3/4 of cap radius, SP cream to pale ochre, stem flushed, mild taste

Russula olivacea (Schaeff.) Pers. -Cuticle peeling 1/3-3/4 of cap radius, colored or flushed stem Cap diameter: 10-20 cm, SP yellow to deep ochre-orange, mild taste

Russula paludosa Britzelm. - Cuticle peeling 1/3-3/4 of cap radius, SP cream to pale ochre, mild taste

R. peckii Singer - medium, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed, mild taste

R. pseudolepida – similar to **R. lepida**. Medium size, spotted white-to yellow, depressed center, incurved margin, cream to pale yellow gills, some fork, SP deep cream, white stem tapers at base, browns with handling, under hardwoods, mild taste

R. pseudopeckii Fatto – medium, cuticle peels 1/3 to 3/4, SP cream to pale ochre, stem flushed, taste is mild

R. pulchella Borszczow - medium, cuticle peels 1/3 to 3/4 of cap radius, SP cream to pale ochre, stem flushed, hot, acrid or peppery taste

R. pulchra Burlingham 'Beautiful Russula'. Cap pinkish coral to peachy orange with white, cream or yellow patches. Dry matt surface, sometimes cracks. STRIATE margin. Gills are white becoming creamy white. STIPE with PINK tinge. Spore print is cream. Can be found in deciduous woods, especially under oak and beech. Mild taste. Similar to **Russula flavisiccans**, which is bitter tasting.

R. queletii Fr. medium, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed, acrid, hot or peppery taste

R. rhodopoda Zvara – medium, cuticle peels 1/3 to 3/4, SP cream to pale ochre, stem flushed, taste is acrid, hot or peppery

R. rubriochracea Murrill - medium, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed, acrid, hot or peppery taste

R. roseipes Bres. - medium, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed, mild taste

R. subtenuiceps Fatto - medium, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed, acrid, hot, peppery taste

R. tenuiceps Kauffman - medium, cuticle peels 1/3 to 3/4 of cap radius, SP yellow to deep ochre-orange, stem flushed, acrid, hot, peppery taste

R. tuberculata Murrill – medium, cuticle peels 1/3 to 3/4, SP cream to pale ochre, stem flushed, taste is mild

YELLOW to ORANGE RUSSULA large 10-20 cm in SWAMPS

Both *Russula claroflava* and *Russula decolorans* can be found in damp, swampy bogs usually under birch and conifers.

Russulas with colored stems

Russula pulchra Burlingham 'Beautiful Russula'. Cap pinkish coral to peachy orange with white, cream or yellow patches. Dry matt surface, sometimes cracks. STRIATE margin. Gills are white becoming creamy white. STIPE with PINK tinge. Spore print is cream. Can be found in deciduous woods, especially under oak and beech. Mild taste. Similar to *Russula flavisiccans*, which is bitter tasting.