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## NOTES ON THE ETHNOMYCOLOGY OF HUEYAPAN, MORELOS, MEXICO

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Hueyapan is a village in the *municipio* of Tetela del Volcan, in the state of Morelos, Mexico. It is located in the highlands just south of Popocatepetl volcano. The fungi reported in this paper were collected by A. de Avila in Hueyapan and in the forest and fields east of the town, in the localities named Montecillo and Capultitlan, in August of 1977. The specimens, identified by A. L. Welden and G. Guzmán, are deposited in the Mycology Herbarium of the Escuela Nacional de Ciencias Biológicas, Mexico City. Fifty-three species are listed here, eight of which are determined only to genus because of immaturity, lack of critical field notes, or the state of the taxonomy of the group. They are numbered according to the sequence of collecting. In addition, some information is included on species which could not be collected.

The spelling of both Spanish and Nahuatl words (Hueyapan is a bilingual community) follows Hueyapan pronunciation rather than conventional orthography. The Nahuatl etymologies given are the informants' own interpretations of the terms. As will become evident to the reader, names given by different informants to the same species are not always consistent. Some of the names, moreover, were not confirmed by other *jongueros* (people who collect fungi regularly and sell them in the village); these names are marked with an asterisk. Even though the reliability of these terms is questionable, they are included because they may constitute a personal classification of the main informant for this study — doña Gabina Rivera. These terms have been compared with those given by Guzmán (1977) from other parts of Mexico, and in many cases they are similar, although not always identical.

Fungi in general are called *nanagame* (*nanagatl* the singular) in Nahuatl, *jongos* and *hongos* in Spanish. A species which is not eaten will be called *hongo loco* ("crazy fungus") or *cimarrón* ("wild one") in Spanish; in Nahuatl it will be referred to as *tlaljuiznanagatl* ("whatever-it-is fungus") when there is no specific name for it. Various wood-rotting fungi were indicated as *inanagayo de gogohtzin* ("its fungus of the tree", the -yo suffix

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perhaps marking inherent possession) by doña Gabina. A word for "mold" was not elicited, but the verb "to become moldy" was given: "*yopoxcavix notlaxcal*" ("my tortilla has become moldy"). Some fungi are recognized to be poisonous: "*Dicen los ladinos de Tetela 'se honguea'; aqui decimos en mexicano 'monanagavia'.*" Both *se honguea* and *monanagavia* mean literally "he bemushrooms himself", he is poisoned by fungi. These terms are apparently not applied to intoxication by hallucinogenics<sup>1</sup>. Hallucinogenic fungi were, and may still be, used in Hueyapan in association with the ceremonies of the *aguadores* or *quiotlazque*, the rainmakers. The name *ananacame* ("water fungi"), given by Barrios' (1949, p. 65) informant, was not encountered; doña Gabina called them, instead, *yehyegananagame* ("wind fungi" — the *aires*, or winds, are the water supernaturals). Although she pointed out five species as *hongos de tiempo* ("fungi of the weather") which are supposedly used by the *aguadores*, none of these are hallucinogenic. The authors are wary of the informant's claims about these species but include them in the list as a curiosity.

Fungi associated with the rains are thought to be a "cold" food in the traditional hot-cold division of nourishment and illness<sup>2</sup>. "*Los hongos son frios, por eso los viejitos antes de comer hongos se echan su copita, para que no les duela la barriga ... el que acostumbra, pues.*" ("Fungi are cold, that is why the old people, the people who are accustomed, have a drink of liquor, so that they will not get a stomach ache.")<sup>3</sup> Perhaps because of this "coldness" many species are believed to be inedible when raw. One informant stated that all fungi eaten raw are toxic<sup>4</sup>. Another informant added, while commenting on a man who is known to eat two species not considered edible, that, if they were to be very well fried, not even those species should be unhealthy.

There are several ways of cooking fungi. Soft mushrooms such as *matlalitztle* and *tzompilotel* are often baked on the comal griddle or in the embers and eaten with salt on a tortilla, with or without lemon. Various species are cooked in *caldo*, a watery soup with herbs, or in *mole*, a thick sauce with chili pepper. The latter dish is called *nanagamole* ("mushroom stew") in Nahuatl. Some species are also fried in lard. The tough *chilnanagatl* is finely minced or slightly ground on the *metate*, cooked with herbs, and

<sup>1</sup>In classical Nahuatl as recorded by Sahagún, *monanacahuia* is used as "intoxicating oneself with hallucinogenic fungi" (Dibble and Anderson (1963); Book 11, p. 130).

<sup>2</sup>Other foods associated with rains, such as squash and all other vegetables, are "cold". There is a saying involving mushrooms and the first rains: "*Tlategüini, xcaguigan, in moguitlaxcactia in nangame' ... es palabra que tienen los viejitos, pues.*" ("It is thundering, listen you all, the mushrooms are putting their shoes on ... it is an expression the old people use.")

<sup>3</sup>Moreover, a person intoxicated by poisonous fungi is said to be given alcohol as a remedy. Ground cornsilk or corn tassels are also considered a cure for such cases.

<sup>4</sup>Sahagún's informants in the 16th century thought likewise: "... mushrooms of the forest, are not edible uncooked: ... Those which are eaten uncooked ... are fatal." (Dibble and Anderson (1963); Book 11, p. 132).

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used as filling for *clacloyos*, tortilla turn-overs. *Tres picos* are sometimes dried and stored; before cooking they are soaked in water. The people of Hueyapan consider fungi, like other local foods, to be inferior. Many species are, nevertheless, regarded as quite delicious. "*Tlalmachia, huela a tierrita, la tierrita lo produce ...*" ("[A fungus] smells and tastes [pleasantly] like earth, the soil produces it ...").

#### Notes on fungi collected

- Amanita* sp. Young specimen. On soil in pine forest. Not eaten. Coll. No. 65. *Cuacicitlal chichiguiton*\*.
- Amanita* sp. In cornfield. Eaten. Coll. No. 1. *Guatelac*. Said to be toxic unless well cooked. Reported to be the only edible mushroom that grows on the soil in the cornfields.
- Amanita* sp. sect. *Lepidella*. On soil in pine forest. Not eaten. Coll. No. 4. *Cuacicitlal del blanco*\*.
- Amanita caesarea* (Scop. ex Fr.) S. F. Gray. In abandoned cornfield at edge of pine forest. Eaten. Coll. Nos. 54, 74. *Totoltenanagatl, blanquillo, hongo huevo*. Said to grow early in the season with the first rains and to be toxic if eaten raw.
- Amanita crocea* (Quéf.) Sing. On soil in pine forest. Eaten. Coll. No. 17. *Tzompiloteguztle, tzombilotetl amarillo*.
- Amanita fulva* Schaeff. ex Pers. On soil in pine forest. Eaten. Coll. No. 38. *Tzompilotetl, tzombilotetl, vitetl*. Not thought to be toxic if broiled rare, unlike other fungi which are believed to be edible only if well cooked.
- Amanita gemmata* (Fr.) Gill. On soil in pine forest. Not eaten. Coll. No. 55. *Cuacicitlal amarillo*\*.
- Amanita muscaria* ssp. *flavivolvata* Sing. On soil in pine forest. Not eaten. Coll. No. 5. *Cuacicitlal*. Thought to be very poisonous. One old man reported that some people in Hueyapan use it to rid a room of flies, but other informants denied this.
- Armillaria luteovirens* (A. & S. ex Fr.) Gill. On soil in open pine forest. Not eaten. Coll. No. 36. *Nanagame de yehyegatl kuztigüe*\*. Used by the *quietlazque*, according to doña Gabina.
- Astraeus hygrometricus* (Pers.) Morg. On soil along roadside in pine forest. Edible when young, according to doña Gabina. Coll. No. 51. *Popoctzi, Azules, Lactarius indigo*. See *matlalitztle*.
- Blancos. *Hygrophorus* sp. See *iztacnanagatl*.
- Blanquillo. *Amanita caesarea*. See *totoltenanagatl*.
- Cantharellus cibarius* Fr. On soil in pine-oak forest. Eaten. Coll. No. 12. *Teguza*.
- Clavulina rugosa* (Fr.) Schroet. On soil in pine forest. Eaten. Coll. No. 8. *Xeljuaznanagatl, mano de raton*.

- Clitocybe gibba* (Pers. ex Fr.) Kumm. On soil in open pine forest. Eaten. Coll. No. 40. *Tlagonalxicti*. Thought to be especially tasty by doña Gabina.
- Cogogogue ("Cogoc, hot tasting, like chili pepper"; *cogogogue* is the plural, "the hot tasting ones."). *Lactarius deliciosus*. Other informants called these *chilnanaga cogoc*.
- Cogohltantzi ("Cohtlan, gohtlan, the forest; *gogohltitzin* are the trees, *Tlantzi* is the inside."). One informant gave this name for specimens of both *Lactarius salmonicolor* and *L. deliciosus*. There is said to be a *cogohltantzi cimarron*.
- Collybia acervata* (Fr.) Gill. On soil in open pine forest. Not eaten. Coll. No. 37. *Hongos de tiempo*\*. Doña Gabina reports this species as one used by the *quiotlazque*.
- Collybia confluens* (Pers. ex Fr.) Kumm. On soil in pine forest. Not eaten. Coll. No. 31. See *tzotzojiague*\*, *jonguitos de tzotzojiague*\*.
- Collybia dryophila* (Bull. ex Fr.) Quéf. At dry stream edge in a ravine. Not eaten. Coll. No. 23. *Yehyegananagame*\*, *hongos de tiempo*\*. Used by the *quiotlazque*, according to doña Gabina. She believes they grow where the rainbow, *cosemalotl*, has sat.
- Coloraditos\* (Spanish for "little red ones"). *Russula lepida*. Doña Gabina also referred to this species as *chichiltic nanagatl*.
- Cuacicitlal, Cuacicitlalnanacatl, Cuacitlalnanacatl ("Cua, the head; *cicitlal*, stars [referring to the scales on the pileus.]). *Amanita muscaria* ssp. *flavivolvata*<sup>5</sup>.
- Cuacicitlal amarillo\* ("Yellow *cuacicitlal*."). *Amanita gemmata*.
- Cuacicitlal chichiguiton\* ("Small *cuacicitlal*."). Indeterminate young *Amanita* sp. The name may not refer to a certain species but to the fact that the specimen looked like a young *Amanita muscaria*.
- Cuacicitlal del blanco\* ("The white kind of *cuacicitlal*."). *Amanita* sp. sect. *Lepidella*.
- Cuatelac. *Amanita* sp. See *guatelac*.
- Cucharitas (Spanish for "little spoons"). *Helvella macropus*.
- Cucharones (Spanish for "ladles"). *Helvella macropus*.
- Chichigaztle inanaga\* ("Chichicaztle its fungus, the mushroom of the *chichicaztle* plant."). *Tricholoma vaccinum*. *Ijonguitos de chichicaztle*\* ("Its little fungi [Nahuatl possessive on the Spanish noun] of the *chichicaztle*.")
- Chichiltic nanagatl ("Red mushroom."). *Russula lepida*.
- Chilnanaga. *Hypomyces lactifluorum*. See *chilnanagatl*.
- Chilnanaga cogoc ("Hot-tasting *chilnanagatl*."). See *cogogogue*.
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<sup>5</sup>Though Dibble and Anderson (1963; Book 11, p. 132, footnote) suppose *Amanita muscaria* is the *tzontecomananacatl* described to Sahagún, this species is probably the *citlalnanacatl* mentioned by Hernández (1970) as a very poisonous mushroom: "Ergo sunt quidam e Fungis apud eam gentem natis lethales, mortiferique, *Citlalnanacame vocati...*" (Hernández, Liber IX, Caput XCV, p. 357).

- Chilnanagatl ("Chili-pepper mushroom", referring either to its bright red color or to the peppery flavor some informants claimed it has.). *Hypomyces lactifluorum*. *Chilnanaga*.
- Chilnanagatl meco ("Meco, mecohtic, means brownish."). *Hypomyces macrosporus*.
- Cachupines. *Helvella crispa*. See *tres picos*.
- Gomphidius rutilus* (Schaeff. ex Fr.) Lundell & Nannf. On soil in pine forest. Eaten. Coll. Nos. 22, 57. *Teguza itio*. Some of the informants did not know this name but recognized the species as edible.
- Guatelac, Cuatelacnanagatl ("Cua, head, *telahuac*, thick, it has thick skin on top." *Cuatelacti* is the plural form.). *Amanita* sp. *Cuatelac* is a variant of this name.
- Gymnopilus* sp. On an oak stump. Not eaten. Coll. No. 53. *Lengüitas\**.
- Helvella crispa* Scop. ex Fr. On soil in pine forest. Eaten. Coll. No. 7. *Tres picos*, *gachupines*.
- Helvella elastica* Fr. On soil in open pine-oak forest. Eaten. Coll. No. 13. *Tres picos kaputzigue*.
- Helvella macropus* (Pers. ex Fr.) Karst. On soil in abandoned cornfield at edge of pine forest. Eaten. Coll. No. 39. *Cucharitas*, *cucharones*, *chilnanagatl meco*.
- Hongo de huevo. See *totoltenanagatl*.
- Hongos de tiempo\*. *Collybia acervata*. See *yehyegananagame*.
- Hygrophorus* sp. On soil in open pine-oak forest. Eaten. Coll. No. 14. *Iztacnanagatl*, *blancos*. Said to grow early in the season where there has been a fire or where charcoal has been made, and to be toxic if eaten raw.
- Hypomyces lactifluorum* (Schw. ex Fr.) Tul. Ascomycete parasitizing mushrooms, probably *Lactarius*. In pine forest. Eaten. Coll. No. 72. *Chilnanagatl*, *chilnanaga*. It is *tetelquic* ("it produces puckering in the mouth").
- Hypomyces macrosporus* Seaver. Ascomycete parasitizing mushrooms, probably *Lactarius*. In pine forest. Eaten. Coll. Nos. 18, 73. *Chilnanagatl meco*.
- Icompanero de mecohtin\* ("Its companion of [*chilnanagame*] *mecohtin* [Spanish construction with the Nahuatl possessive; the *-tin* suffix marks the plural]."), *su companero del meco\** ("Its [using the Spanish possessive] companion of the [*chilnanaga*] *meco*"). *Lactarius* sp.
- I'icnin cucharitas\* ("Its brother [of the] *cucharitas*"). *Lactarius subdulcis*.
- Ijonguitos de chichicaztle\*. *Tricholoma vaccinum*. See *chichicaztle inanaga\**.
- Iztacnanagatl ("*Iztac*, white, white mushrooms."), *Blancos* (Spanish for "white ones"). *Hygrophorus* sp.
- Jonguitos de tzotzojiague\*. *Collybia confluens*. See *tzotzojiague\**.
- Laccaria laccata* (Scop. ex Fr.) Berk. & Br. On soil in pine forest. Eaten. Coll. No. 20. *Xogoyolli*, *xocoyoles*.
- Lactarius* sp. On soil in pine forest. Not eaten. Coll. No. 16. *Icompañero de mecohtin\**, *su compañero del meco\**.

- Lactarius deliciosus* (L. ex Fr.) S. F. Gray. On soil in pine forest. Eaten. Coll. Nos. 16, 34. Specimen 16 was called by one informant *cogohtlantzi*; specimen 34 was called *chilnanaga cogoc* and *cogogue* by other informants. Matl  
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- Lactarius indigo* Schw. ex Fr. On soil in open pine-oak forest. Eaten. Coll. Nos. 9, 15, 76. *Matlalitztle, azules*. Maz:
- Lactarius piperatus* (L. ex Fr.) S. F. Gray. On soil in pine forest. Eaten. Coll. Nos. 19, 75. *Mantegananagatl*. Meza:
- Lactarius salmonicolor* Heim & Le Clair. In pine forest. Eaten. Coll. Nos. 44, 78. Specimen 44 was called *matlalitztle del monte, matlalillo*. One informant called specimen 78 *cogohtlantzi*. *Matlalillo* is said to be common in the high altitude *oyamel* forest north of Hueyapan. Mora  
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- Lactarius subdulcis* (Bull. ex Fr.) S. F. Gray. On soil in pine forest. Not eaten. Coll. Nos. 32, 61. Specimen 32 was called *teguza cimarron*; 61, two small specimens, was called *i'icnin cucharitas\** by doña Gabina. Ogor  
Ogon
- Lactarius zonatus* (Bull. ex St. Amans) Fr. On soil in pine forest. Not eaten. Coll. No. 50. *Mantega cimarron*. One Hueyapan man is reported to eat this species and also *Russula lepida*. Olon
- Lengüitas\** (Spanish for "little tongues"). *Gymnopilus* sp. Panu
- Lepiota clypeolaria* (Bull. ex Fr.) Kumm. On soil in pine forest. Not eaten. Coll. No. 48. *Sombrerito\**. Parag  
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- Lycoperdon* sp. Immature. On soil in pine forest. Eaten while young. *Popoctzi*. Pleur
- Majadananagame ("Majada, manure, mushrooms of the manure" [*majada*, a Spanish word, is thought to be Nahuatl for the Spanish *abono*, manure]). *Volvariella bombycena*. The name is probably applied to other coprophilic fungi as well. t  
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- Mano de ratón. See *xeljuaznanagatl*. Pleur
- Mantega cimarron ("Wild *mantegananagatl*" [the Spanish *cimarrón* is Nahuatlized in this instance by shifting the stress to the penultimate syllable].) Also referred to as *Mantega tuhmio* ("woolly *mantega*") by one informant. *Lactarius zonatus*. F  
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- Mantega tuhmio. *Lactarius zonatus*. See *mantega cimarron*. n
- Mategananagatl ("Mantega, lard" [from the Spanish *manteca*]). *Lactarius piperatus*. l
- Matlalillo ("Small *matlalitztle*" [the *-illo* suffix is a Spanish diminutive]). *Lactarius salmonicolor*. Psathy  
e
- Matlalitztle ("Matlalitztle because they are blue, *matlalectic* is the bluish color of a bruise on the body; *-itztle* because it is 'cold', mushrooms are 'cold' [*itztic* is the adjective meaning cold].")<sup>6</sup>, Azules (Spanish for "blue ones"). *Lactarius indigo*. Quimi  
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<sup>6</sup> Sahagún's informants called a blue gemstone *matlalitztli*; *itztli* is Nahuatl for "obsidian". (Dibble and Anderson (1963); Book 11, p. 227).

1. ht- Matlalitztle del monte ("Matlalitztle of the high altitude forest."). *Lactarius salmonicolor*.
- Mazajielle, Mazayelle ("Deer's liver."), Mazatliyel ("The deer its liver"). *Tylopilus felleus*, *Tylopilus indecisus*.
- Mazajielle de tiempo\* ("Mazajielle of the weather."). *Xerocomus subtommentosus*.
- Mezorras ("Metl, the maguey [an agave], zorras [Spanish], foxes; foxes often climb on the maguey to drink its sap.").<sup>7</sup> *Pleurotus cornucopiae*.
18. One *Morchella angusticeps* Peck. At edge of road along ravine. Eaten. Coll. No. 42. *Olonanaga*.
- Nanagame de yehyega. *Panus crinitus*. See *yehyegananagame*.
- Nanagame de yehyega kuztigue. *Armillaria luteovirens*. See *yehyegananagame*.
- 61, a. iten. eat Ogonanagatl ("Ogotl, pine, pine fungus."). *Suillus punctipes*.
- Ogonanagatl cimarron ("Wild ogonanagatl."). *Suillus luteus*.
- Olonanaga ("Olotl, corncob, they are like corncobs."). *Morchella angusticeps*. There is said to be a black *olonanaga*. The name probably applies to various species of *Morchella*.
- en. *Panus crinitus* (L. ex Fr.) Sing. On soil in pine forest. Not eaten. *Nanagame de yehyega*\*. Doña Gabina says this species is used by the *quiotlazque*.
- Paraguas\* (Spanish for "umbrella"). *Russula olivacea*.
- Paraguas ihermanitos\* (*Paraguas* its [Nahuatl possessive] little brothers [Spanish], the little brothers of *paraguas*.). *Thelephora caryophyllea*.
- a, a [ure]. ro- *Pleurotus cornucopiae* (Paul. ex Pers.) Gill. On a maguey (an agave) at the edge of a cornfield. Eaten. Coll. No. 43. *Mezorras*. Thought to be tasty though tough. It grows with the first rains, before the fungi of the forest appear.
- Pleurotus laevis* (Berk. & Curt.) Sing. Attached to stump in pine forest. Eaten. Coll. No. 41. *Tepetomananagatl*. Said to be rare.
3. by Popoctzi ("Popoca, smoke, little smoke [-*tzin(n)* is the Nahuatl diminutive].). The name designates gasteromycetes whose spore masses are powdery at maturity. Reported as growing abundantly where charcoal has been made. Species collected were *Astraeus hygrometricus*, *Scleroderma laevis*, and an immature *Lycoperdon*.
- 9 *Psathyrella spadicea* (Schaeff. ex Fr.) Sing. In open field among weeds. Not eaten. Coll. No. 25. *Xoletl* (according to doña Gabina).
- Quimichmame ("Mouse hands."). *Ramaria botrytis*. The name probably designates various coral fungi. See *xeljuaznanagatl*.
- Quimichnanagatzitzin\* ("Little mouse fungi [-*tzitzin* marks the diminutive plural]."). See *quimichmame*.

<sup>7</sup>This may be the *mananacatl* referred to in the *Florentine Codex* (see Dibble and Anderson (1963), Book 11, p. 132).



- Ramaria botrytis* (Fr.) Rick. On soil in pine forest. Eaten. Coll. Nos. 11 (*R. botrytis* var. *holorubella* (Pk.) Corner), and 28. Specimen 11 was called *xeljuaznanagatl*; specimen 28 was called by other informants *quimichmame* and *quimichnanagatzitzin*.
- Russula lepida* Fr. On soil in pine forest. Not eaten. Coll. No. 2. *Coloraditos\**, *chichiltic nanagatl*. One Hueyapan man apparently eats this species and also *Lactarius zonatus*.
- Russula olivacea* (Schaeff. ex Schw.) Fr. On soil in open pine forest. Not eaten. Coll. No. 35. *Paraguas\**.
- Scleroderma laeve* Lloyd em. Guzmán. On soil among grass at edge of road. Eaten when young, according to doña Gabina. *Popoztzi*.
- Sombrerito\* (Spanish for "little hat"). *Lepiota clypeolaria*.
- Sparassis* sp. aff. *radicata* Weir. At the base of a custard apple tree in an orchard. Eaten. *Totomachnanagatl*. Said to grow late in the season.
- Stereum hirsutum* (Pers. ex Fr.) S. F. Gray. On fallen wood in ravine. Not eaten. *Tubitos\**.
- Su companero del meco\*. *Lactarius* sp. See *icompanero de mecohtin\**.
- Suillus luteus* (L. ex Fr.) S. F. Gray. On soil in pine forest. *Ogonanagatl cimarron*. This species is differentiated from the edible *Suillus* by the fact that the pore field is not white.
- Suillus punctipes* (Peck) Sing. On soil in pine forest. Eaten. *Ogonanagatl*. The viscid integument of the pileus is removed before cooking. This species is considered less-desirable food.
- Teguza ("Teguza because they are yellow, *guztic* is yellow. There is a yellow wild flower called *teguza*." *Teguzahiti* is the plural form.). *Cantharellus cibarius*.
- Teguza cimarron ("Wild *teguza*."). *Lactarius subdulcis*.
- Teguza itio ("Teguza its uncle [the Spanish *tio* is Nahuatlized by shifting the stress to the *i*-prefix, the possessive], *teguza's* uncle."). *Gomphidius rutilus*.
- Tepetomananagatl ("Tepetomatl is the *madroño* tree, this mushroom grows on the *madroño*."). *Pleurotus laevis*.
- Thelephora caryophylla* Fr. On soil in open pine forest. Not eaten. Coll. No. 63. *Paraguas ihermanitos\**.
- Tlagualxicti ("Tlagual, food, and *xictle* means navel [referring to the umbonate pileus]." The *-ti* suffix marks the plural.). *Clitocybe gibba*.
- Totomachnanagatl ("Totomachtle, the corn husk; they look like cornhusks, they are whitish."). *Sparassis* sp. aff. *radicata*.
- Totoltenanagatl ("Totoltetl, egg"), Blanquillo (Spanish for "egg"), Hongo de huevo (Spanish, "egg mushroom). *Amanita caesarea*. Young *tzompilote* specimens are also called Blanquillitos ("little eggs").
- Tres picos (Spanish for "three peaks" or "three beaks"), Gachupines (Colloquial Mexican Spanish for "Spaniards"). *Helvella crispa*. One informant thought *tres picos* is the Nahuatl name, *gachupines* its Spanish equivalent. There is said to be a large black *tres picos* that grows in the high altitude forest.

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- Tres picos kaputzigue ("Black [plural] *tres picos*"). *Helwella elastica*. *Tricholoma vaccinum* (Pers. ex Fr.) Kumm. On soil under *chichicaztle* tree in open forest. Not eaten. Coll. No. 64. *Chichigaztle inanaga\**, *injonguitos de chichicaztle\**.
- Tubitos\* (Spanish for "little tubes"). *Stereum hirsutum*. Doña Gabina thought this name to be Nahuatl.
- Tylopilus felleus* (Bull. ex Fr.) Karst. On soil in pine forest. Eaten. Coll. No. 45. *Mazajielle*, *mazayelle*, *mazatliyel*. This is recognized as the bitter kind; the pellicle and the stalk are discarded. Said to be toxic if eaten raw. It is thinly sliced before being broiled.
- Tylopilus indecisis* (Peck) Murr. On soil in pine forest. Eaten. Coll. No. 21. See *Mazajielle*, *mazayelle*, *mazatliyel*. One informant added that this is *del dulce* (The sweet one, the non-bitter kind).
- Tzombilotetl amarillo. *Amanita crocea*. See *tzompiloteguztle*.
- Tzompiloteguztle ("The yellow *tzompilotetl*."), Tzombilotetl amarillo ("Yellow [Spanish] *tzombilotetl*."). *Amanita crocea*.
- Tzompilotetl, Tzombilotetl ("It is called *tzompilotetl* because when it is young it [the unexpanded pileus] is like a little head; *tzompilotl* is the buzzard."). *Vitetl*, *Vivitehtzin*. *Amanita fulva*. Young specimens are referred to as *Blanquillitos* (Spanish, "little eggs"). See also *tzompiloteguztle*.
- Tzotzojiague\* ("Tzojiac, it smells ugly, like gunpowder." [The *-gue* suffix indicates the plural.]), *Jonguitos de tzotzojiague\** ("Little *tzotzojiague* mushrooms."). *Collybia confluens*.
- Vitetl, Vivitehtzin. *Amanita fulva*. See *tzompilotetl*.
- Volvariella bombycena* (Schaeff. ex Fr.) Sing. On ox manure. Not eaten. Coll. No. 24. *Majadanaganame*.
- Xeljuaznanagatl ("Xeljuaztle, the *zaganeljuatl* [grass root] brush."), *Mano de raton* (Spanish for "mouse hand")<sup>8</sup>. *Clavulina rugosa*, *Ramaria botrytis* var. *holorubella*. *Xeljuaznanagatl*, *quimichmame* and *mano de raton* seem to be equivalent generic names for various coral fungi. A *xeljuaznanagatl cimarron* was reported.
- Xerocomus subtomentosus* (L. ex Fr.) Qué. On sprouting stump in pine-oak forest. Not eaten. Coll. No. 27. *Mazajielle de tiempo*. Used by the *quiotlazque*, according to doña Gabina.
- Xocoyoles. *Laccaria laccata*. See *xogoyolli*.
- Xogoyolli ("Because it is the smallest mushroom, it is the *xogoyotl* of the mushrooms. [*Xogoyotl* is the last child in the family.] There is a small plant with edible bulbs that is also called *xogoyolli*." *Xogoyolti* is the plural form, *xocoyoles* the Spanicized plural.). *Laccaria laccata*.

<sup>8</sup> A *xelhuaznanacatl* is described in the *Florentine Codex* (Dibble and Anderson (1963); (2, Book 11, p. 132).

Xoletl ("It must be very delicate, *xolectle* is one easily hurt." *Xoleme* is the plural.). *Psathyrella spadicea*. Some informants did not know the species but were aware that the *xoleme* are eaten in nearby villages in the state of Puebla, where they are common.

Yehyegananagame ("Mushrooms of *aire*" [the *aires* are the water supernaturals in local belief.]), Nanagame de yehyega (*Yehyega*, wind), Hongos de tiempo (Spanish, "mushrooms of the weather", *i.e.* mushrooms for predicting the weather.). Under these generic names doña Gabina pointed out three species: *Armillaria luteovirens* (*nanagame de yehyega kuztigue*, "yellow mushrooms of *aire*"), *Collybia dryophila*, and *Panus crinitus*. None of these are hallucinogenic and may not be used by the *quiotlazque* as she claimed.

#### Notes on fungi not collected

Cozavananagatl ("Cozavatl, the *cazahuate* tree: *co*, the tree, *zavatl*, the pimples on its barks."). Called in Spanish *hongo de cazahuate*. It is said to grow on *cazahuate* trees mainly in the *tierra caliente*, the drier tropical lowlands to the south of the village, and also around Hueyapan on oaks. Eaten.

Cuitlacoche ("*Cuitla*, excrement, *cochi*, the pig, pig's excrement."). [The original etymology probably involved the root *cochi*, "to sleep" — the smut causes the corn ear to "sleep", to fail to mature.] Described as a black corn smut, probably *Ustilago zaeae* Unger. Curiously, it is rarely eaten in Hueyapan; it is prepared as a sweet, boiled with sugar, but is not well liked. In the neighboring village of San Juan Amecac it is commonly eaten, fried in lard and seasoned with salt and *epazote*. *Huitlacoche*, as it is called in Spanish, is generally a common food in Mexico<sup>9</sup>.

Iczonanagatl ("*Iczotl*, the *icciote* [*Yucca* sp.]). It grows on the rotten parts of the *Yucca* trunk. Described as similar to *mezorras*, q.v. Eaten. Some informants did not know this fungus.

Pancitas (Spanish for "little bellies"), *Panzahti* (Nahuatl plural on the Spanish *panza*, "belly"). May be another name for *Morchella angusticeps*, or a similar species. Eaten.

Tlachpavaznanagatl ("*Tlachpavaztle*, the hand broom, *cohtlachpavaztle*, the broom with a stick."). Described as a coral fungus similar to *xeljuaznanagatl*, but larger. Eaten.

Yelonagatl ("*Yelotl*, *elote*, tender corn."). Not collected. Described as a white corn smut: "*Se hongala mazorquita*" ("The ear of corn is attacked by it."). Eaten.

<sup>9</sup>The *Florentine Codex* includes a description of *cuitlacoche* (Dibble and Anderson (1963); Book 11, p. 281).

#### References

- Amos, Miguel E.,  
Casa de Tlalcala,  
Tlalcala, Charles E. Dibble,  
*Things of Nahuatl*  
Amán, Gaston, I.  
*Destructores de  
vegetales*  
Sanán, Francisco  
*Plagas de  
tatem expres*  
1790.

## References

- Barrios, Miguel E., *Textos de Hueyapan, Morelos*, in *Tlalocan*, Volume III, No. 1, La Casa de Tlaloc, Mexico, 1949.
- Dibble, Charles E. and Arthur J. O. Anderson, *Florentine Codex, General History of the Things of New Spain, Fray Bernardino de Sahagún*, The University of Utah, 1963.
- Guzmán, Gastón, *Identificación de los Hongos. Comestibles, Venenosos, Alucinantes y Destruyores de la Madera*, Ed. Limusa, Mexico, 1977.
- Hernández, Francisco, *Opera, cum edita, tum inedita, ad autographi fideum et integritatem expressa, impensa el jussu regio*, Matrivi, Ex typographia Ibarrae Heredum, 1790.