## IDPHY: MOLECULAR AND MORPHOLOGICAL IDENTIFICATION OF PHYTOPHTHORA BASED ON THE

TYPES

**TABULAR KEY:** Legends for morphological characters, and colony morphology.

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MORPHOLOGICAL CHARACTERS	DEFINITION OF CODES
	P = papillate (3.5 μm or more)
PA = PAPILLAE	SP = semipapillate (less than 3.5 μm)
	NP = nonpapillate
SSH = SPORANGIA SHAPE	G = globose
	SG = subglobose
	E = elipsoid
	El= elongate
	L = limoniform
	O = ovoid
	Ob = obovoid
	P = pyriform
	Op = obpyriform
	R = reniform
	T = turbinate
	Ot = obturbinate
	Obc = obclavate
	S = sickle -shaped
	l = irregular
	D = distorted shapes
	WC = with constricted middle
	tp = tapered base
	en =elongated neck
	In red = species that require special methods
	C = Caducous
CA = CADUCITY	- = non caducous
	C/- = ocassionally caducous
	S = short (5 μm long or less)
	M = medium (between 5 - 20 μm long)
PE = PEDICEL	L = long (20 μm or more )
	M/L = medium and long pedicels
	S/M = short and medium pedicels
	- = no pedicel
PR = INTERNAL PROLIFERATION	I = Internal proliferation
	N = nested
	E = extended
	NE = nested and extended
	EX = external

HS = HYPHAL SWELLINGS HS = HYPHAL SWELLINGS HS = HYPHALLISM H = HOMOTHALLISM HS = SUBJICASE ACCOUNT AND A COUNT AN		- = no proliferation
SPO = SPORANGIOPHORE       CLS = close sympodial         SPO = SPORANGIOPHORE       I = umbellate         IB = irregularly branched       E = erected. Downy mildew like.         IS = Intercalary sporangia       GS = globose swellings         CH = CHLAMYDOSPORE       GG = globose         SG = globose       GG = globose         CH = CHLAMYDOSPORE       SG = subglobose         CH = CHLAMYDOSPORE       SG = subglobose         CH = chlLAMYDOSPORE       SG = subglobose         CH = chlLAMYDOSPORE       SG = subglobose         SG = subglobose       I = individual         L = lateral       T = terminal         T = intercalary       HS = present         HS = present       GG = globose         SG = subglobose       SG = subglobose         SG = subglobose       SG = subglobose         SG = subglobose       SG = subglobose         G = globose       SG = subglobose         SG = subglobose       SG = subglobose         SG = subglobose       SG = subglobose         SG = subglobose       SG = subglobose         G = globose       SG = subglobose         SG = subglobose       SG = subglobose         G = globose       SG = subglobose         G = clostered       SG =		
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S = sterile S = smooth wall	H = HOMOTHALLISM	HO = homothallic
S = smooth wall		HE = heterothallic
		S = sterile
S/tb = smooth wall, tapered base		S = smooth wall
		S/tb = smooth wall, tapered base

OOG = OOGONIUM	SW = slight wavy
	O = ornamented
	O/tb = ornamented wall/tapered base
	O/S = variable, ornamented and smooth
AN = ANTHERIDIA	P = paragynous
	A = amphigynous
	P/A = predominantly paragynous
	P/A = predominantly amphigynous
OOS = OOSPORE	P = plerotic
	A = aplerotic
	SA = slightly aplerotic
	P/A = plerotic and aplerotic
C= COLONY PATTERN	V8 = Clarified V8 juice agar
	PDA = Potato Dextrose Agar (30gr Difco)
	CMA = Corn Meal Agar
	CH = Chrysanthemum
	RO = Rozette or petaloid
	RA = Radiate
	ST = Stellate
	ND = No distinctive pattern
	sg = slow growth
	U = undetermined
T = TEMPERATURE	MIN = minimun temperature
	OPT = optimum temperature
	MAX = maximun temperature
	U = undetermined