

**IBT-UNALM PHENOTYPING Potato accessions selected for putative levels of Tolerance to**

<b>Code</b>	<b>Region</b>	<b>altitude</b>	<b>Latitude</b>	<b>longitude</b>
Pe-002	Huancavelica	3403	12°50'38.81"S	74°33'41.90"O
Pe-010	Huancavelica	3403	12°50'38.81"S	74°33'41.90"O
Pe-012	Huancavelica	3403	12°50'38.81"S	74°33'41.90"O
Pe-016	Huancavelica	3403	12°50'38.81"S	74°33'41.90"O
Pe-025	Huancavelica	3403	12°50'38.81"S	74°33'41.90"O
Pe-044	Junín	3260	12°00'50.00"S	75° 13'11.00"O
Pe-047	Junín	3260	12°00'50.00"S	75° 13'11.00"O
Pe-048	Junín	3260	12°00'50.00"S	75° 13'11.00"O
Pe-083	Cuzco	3357	13°34'17.82"S	71°51'59.70"O
Pe-112	Cajamarca	3970	7°10'2.74"S	78°11'17.48"O
Pe-157	Puno	3852	15°52'52.13"S	70° 0'1.14"O
Pe-184	Puno	3852	15°52'52.13"S	70° 0'1.14"O
Pe-185	Puno	3852	15°52'52.13"S	70° 0'1.14"O
Pe-188	Junín	3260	12°00'50.00"S	75° 13'11.00"O
Pe-203	Junín	3260	12°00'50.00"S	75° 13'11.00"O

\* Preliminar identification

\*\* Z. Huaman, J.T. Williams, W. Salhuana and. L. Vincent. 1977. Descriptors for the cultivat

\*\*\* R Resistant. Scale: Forbes et al. 2014

Frost and Late Blight (Rancha).				Tuber numbers /plant	Yield txha-1
Name o f Variety	Native /Clone	specie	ploidy *		THA2
Puka Camutillo	Native	Solanum goniocalyx	2x	9.6	4.2
Huaña	Native	Solanum juzepczukii	3x	18.5	18.6
Suyto camutillo	Native	Solanum stenotomum	2x	3.4	0.9
China siri	Native	Solanum curtilobum	5x	13.1	6
Guindo Gaspar	Native	Solanum goniocalyx	2x	18.6	10.8
302231.12	clone improved	hibridos mejorados	4X	22.7	28.2
396034.18	clone improved	hibridos mejorados	4X	15.4	11.1
395112.19	clone improved	hibridos mejorados	4X	15.3	26.7
Muro Waman uma	Native	Solanum tuberosum sube	4x	5.6	2.4
Huagalina	Native	Solanum tuberosum sube	4x		
Parqo Morado	Native	<i>Solanum x juzepczuckii</i>	3x	29.2	56.03
Piñaza juzepczukii	Native	<i>Solanum x juzepczuckii</i>	3X	35.5	43.07
Loka juzepczukii	Native	<i>Solanum x juzepczuckii</i>	3X	28.5	41.25
Muru Huayro	Native	<i>Solanum chaucha</i>	3X	9.9	14.7
Sumacc soncco	Native	Solanum tuberosum subesp. Andige		10.2	9

ed potato. International Board for Plant Genetic Resources. Rome, Italy. AGPE:IBPGR/77/32.

Frost field evaluation	Frost damage in chamber (Jauja, January 2018)		Frost damage in chamber (Huancayo-Cicaya, December, 2018)		***Late Blight Resistance. Fied Evaluation.	Predominant Tuber Skin Color**
	-4°C	-8°C	-4°C	-8°C		
<sup>2</sup> E1						
3			2	3		7
2	2	6	1	3		8
3			1	3		8
3			1	5		4
3			3	5		7
3	1	6	1	4	R	4
3	1	6	3	3	R	4
3	1	6	0	5	R	5
3			3	4		8
3	1	6	2	5		6
3			2	5		
1	1	2	2	5		4
1	1	2	1	5		4
	1	6	2	3		7
			2	3		7

Pedominant tuber skin color deep	Secondary tuber skin Color	Distribution of secondary tuber skin color	Predominant tuber flesh color	Secondary tuber flesh color	Distribution of secondary tuber flesh color	General tuber shape
3	4	4	1	0	0	4
2	0	0	1	8	6	6
1	4	4	1	0	0	5
2	0	0	1	0	0	6
2	0	0	2	8	1	2
1	0	0	1	0	0	5
2	0	0	2	0	0	3
3	4	4	1	0	0	6
1	4	4	1	0	0	3
3	4	5	2	7	1	6
2	0	0	1	0	0	3
3	0	0	1	0	0	8
1	0	0	1	8	5	6
2	0	0	1	0	0	6

Unusual tuber shape	Depth of tuber eyes	Plant habit	Stem color	Stem wing	Leaf dissection	Number of primary lateral leaflets
0	3	2	2	2	3	6
0	5	4	4	2	3	6
0	1	2	1	2	3	5
1	3	3	1	2	3	5
9	9	2	2	1	3	5
0	3	3	1	1	3	6
0	1	2	1	2	3	5
0	3	3	1	2	3	6
0	3	4	1	0	3	4
0	5	3	3	2	3	6
0	5	3	3	1	3	6
0	3					
0	7	5	2	1	3	6
0	7	3	6	3	3	6

Number of interjected leaflets	Number of interjected leaflets on petiolule	Terminal leaflet shape
2	1	3
2	0	2
2	0	2
2	0	1
2	0	2
2	0	2
2	0	2
2	0	2
2	0	1
2	1	2
1	0	1
2	0	2
2	0	2