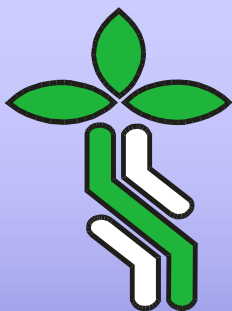


The most important fruit tree viruses in the Czech Republic

Apple mosaic, prune dwarf, prunus necrotic ringspot ilarviruses and plum pox potyvirus



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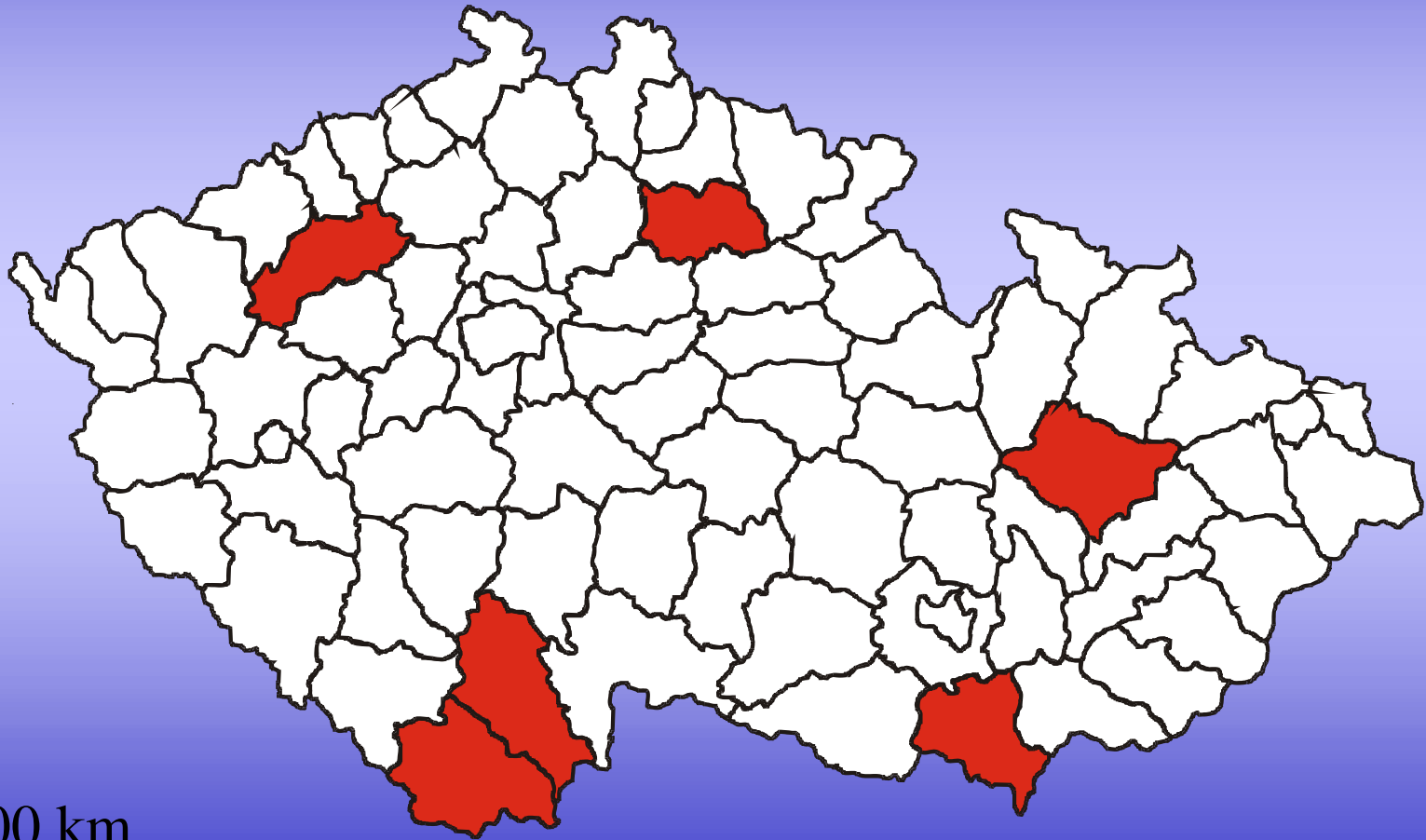
Searching for virus-universal primers

Available CP nt sequences

	Czech	other European	American	other
ApMV	4	1	2	17
PDV	11	2	1	1
PNRSV	19	24	36	1



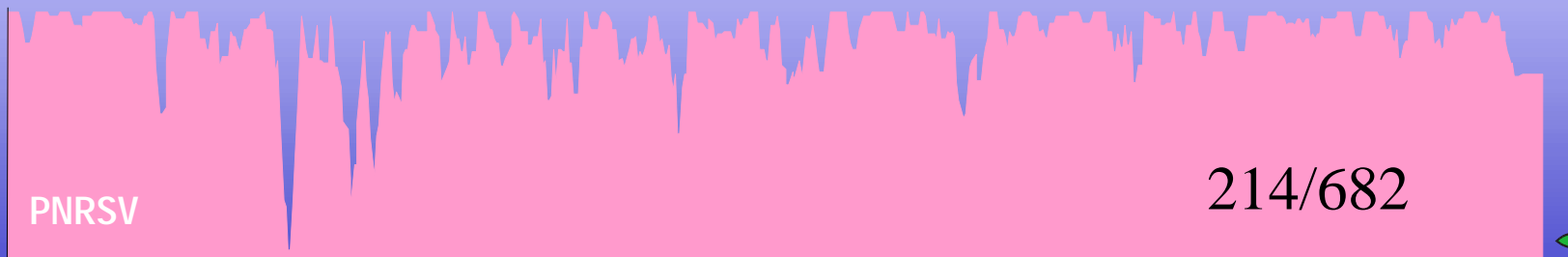
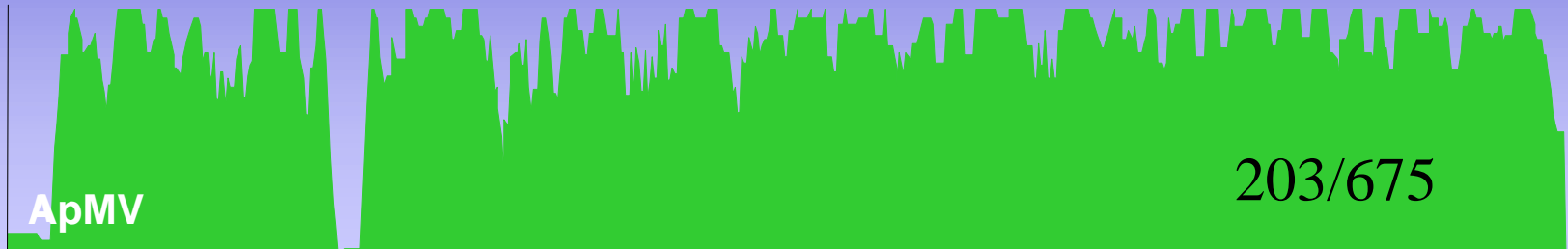
Sources of the Czech isolates



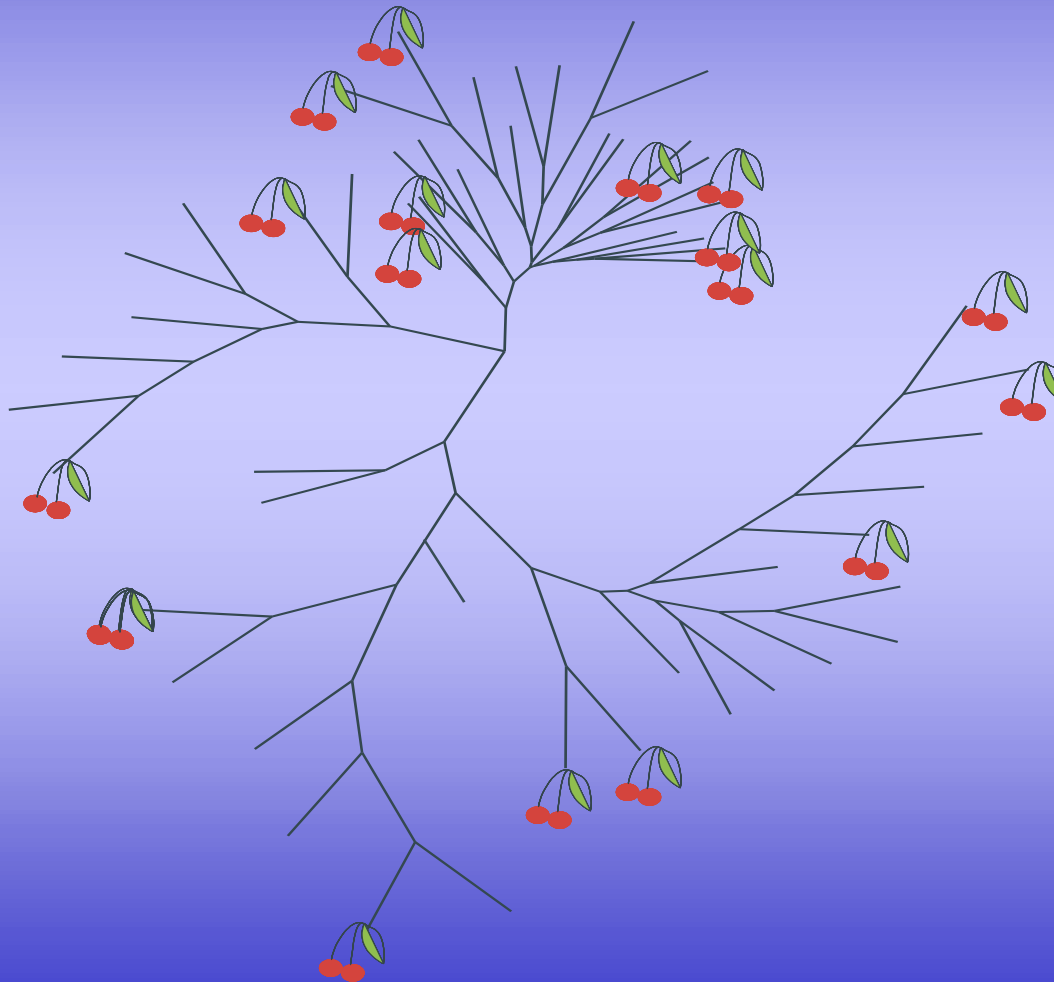
100 km



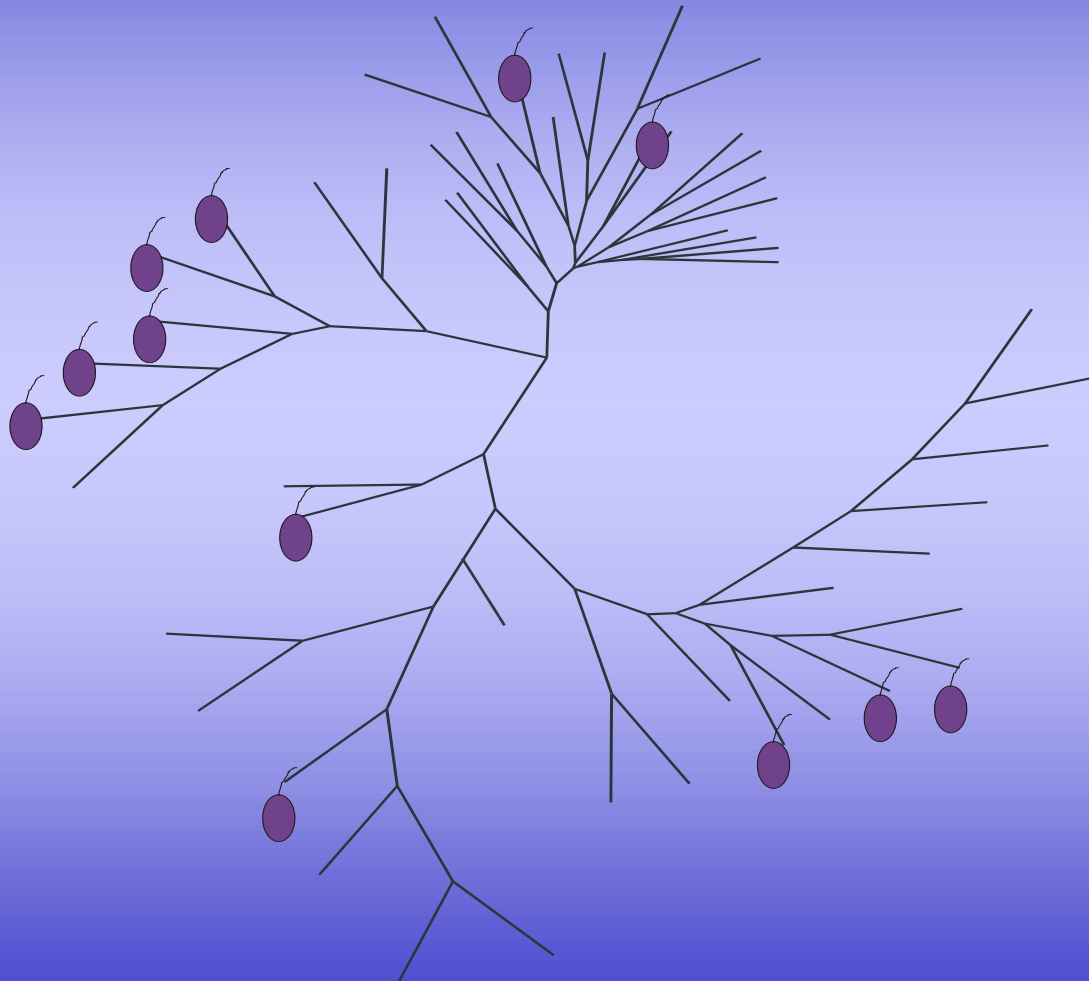
Distribution of mutation on the CP gene



Phylogeny of PNRSV



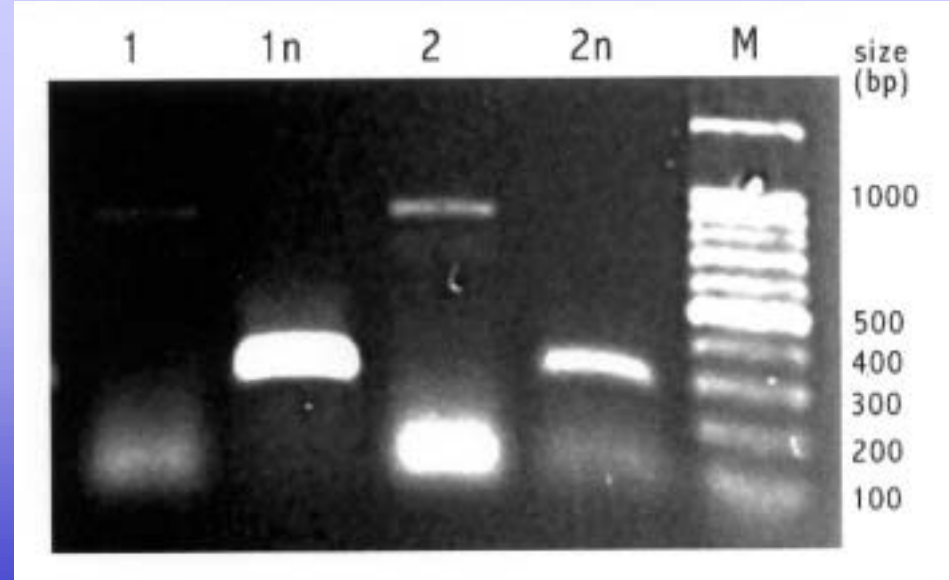
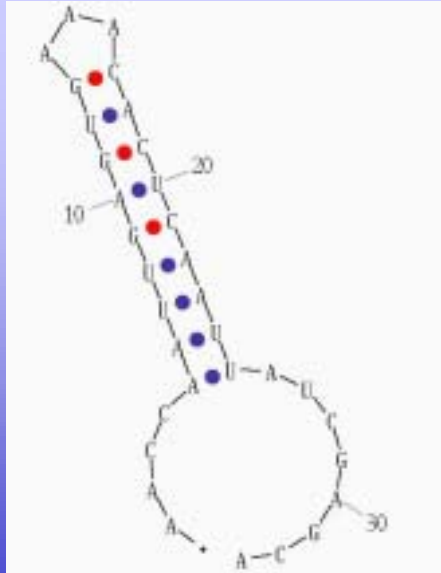
Phylogeny of PNRSV



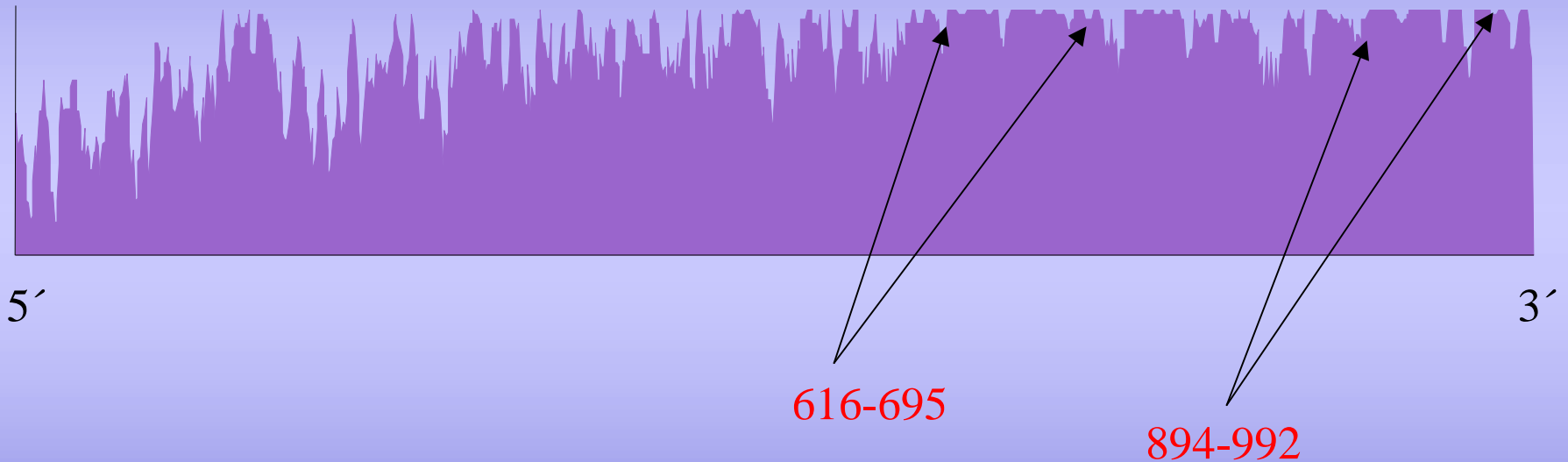
MP

intergenic region of PDV

L45	AAGCTTTTGG	TGTAACGATT	GGTAACTCA	CTTTGTGAGT	TAA	TAGCTCG	TTTGTTTTAC	CAA-TTTACT	TCCAACTTTC	GACTGTTTGT
U10	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
AF737	.....	.....G.....	.....	.....	.....	.....	.....C.....	.....-	.....	.....
AF740	.....	.....G.....	.....	.....	.....	.....	.....	.....-	.....	.....A.....
AF739	.....	.....G.....	.....	.....	.....	.....	.....	.....-	.....	.....A.....
AF738	.....	.....	.....	.....	.....	.....	.....	.....-	.....	.....
AF741	.....	.....G.....	.....	.....	.....	.....	.....	.....-A.....	.....	.....A.....
AF746	.....	.....G.....	.....	.....	.....	.....	.....	.....T.....	.....C.....	.....A.....
AF747	.....	.....G.....	.....	.....	.....	.....	.....	.....T.....	.....G.....C.....	.....A.....
AF744	.....	.....	.....	.....	.....	.....	.....	.....-	.....	.....A.....
AF745	.....	.....	.....	.....	.....	.....	.....	.....-	.....C.....	.....A.....A.....
AF743	.....	.....G.....	.....	.....	.....	.....T.....	.....	.....-	.....	.....
AF742	.....	.....G.....	.....	.....	.....	.....	.....	.....-	.....	.....C.....A.....



Distribution of mutation on the CP gene of PPV



± conservative regions:

- **Petrzik K., O.Lenz (2002)** Remarkable variability of Apple mosaic virus capsid protein gene after the nucleotide position 141 *Archives of Virology* **147** 1275-1285
- **Vašková D., K.Petrzik, J.Špak (2000)** Molecular variability of the capsid protein of the prune dwarf virus *Eur. J. Plant Pathol.* **106** 573-580
- **Vašková D., K.Petrzik, R.Karešová (2000)** Variability and molecular typing of the woody-tree infecting necrotic ringspot ilarvirus *Archives of Virology* **145** 699-709
- **Navrátil M., K.Petrzik et al.** Plum pox virus in *Asia in preparation*