

**Disease reactions of spinach differentials for determining the race identification of isolates of the spinach downy mildew pathogen, *Peronospora farinosa* f. sp. *spinaciae*.**

Differential cultivar	Race of <i>Peronospora farinosa</i> f. sp. <i>spinaciae</i> *												
	1	2	3	4	5	6	7	8	9	10	11	2209	510C
Viroflay	+	+	+	+	+	+	+	+	+	+	+	+	+
Resistoflay	-	-	+	+	+	+	+	+	+	+	+	+	+
Califlay	-	+	-	+	-	+	+	-	-	+	-	-	+
Clermont	-	-	-	-	+	+	+	+	+	+	+	+	nt
Campania	-	-	-	-	-	+	-	+	+	+	-	+	+/-
Boeing (= Avenger in the USA)#	-	-	-	-	-	-	-	+	-	+	-	+	-
Lion	-	-	-	-	-	-	-	-	-	+	-	-	-
Lazio	-	-	-	-	-	-	-	-	-	-	+	+	+
Whale	-	-	-	(-)	-	(-)	(-)	-	-	+	-	+	nt

\* Races of the downy mildew pathogen as of September 2010. Isolates 2209 and 510C represent unnamed, deviating isolates not officially recognized as a distinct race (by September 2010).

# The differential response of Boeing to these known races of Pfs is the same as that of Avenger, the name assigned to this cultivar in the USA.

+ = Susceptible reaction = sporulation observed on cotyledons in the differential seedling test.

- = Resistant reaction = no sporulation observed on cotyledons in the differential seedling test.

(-) = Reduced level of infection, often referred to as field resistance = sparse sporulation on the tips of cotyledons in the differential seedling test.

+/- = Variability in the number of resistant and susceptible plants observed.

nt = Not (yet) tested.

The International Seed Federation (ISF) has information on this spinach host set and differential hosts for other diseases at: [http://www.worldseed.org/isf/differential\\_hosts.html](http://www.worldseed.org/isf/differential_hosts.html)