



Gisela 12®

Nuevo portainjerto de Cerezos:
precoz y productivo

En USA han evaluado un nuevo portainjerto de la serie Gissen, denominado Gisela 12, este ha presentado ventajas interesantes en precocidad, vigor y especialmente un mejor calibre de la fruta.

El vigor de G.12 depende de la variedad que se combina, se ha visto en Oregón que combinado con Bing su vigor es intermedio entre G.5 y G.6. Pero al usarse G.12 con Regina, presenta vigor un 10% superior a G.6 y es preferido por los productores ya que es mas fácil manejar el vigor y calibre de la fruta.

Ambos, G.6 y G.12 son muy productivos y precoces en entrar en producción.

G.12 se adapta muy bien a diferentes tipos de suelos y aparentemente se adapta bien a suelos húmedos al igual que G.6.

Los árboles en G.12 presentan ramas abiertas y con buenos ángulos.



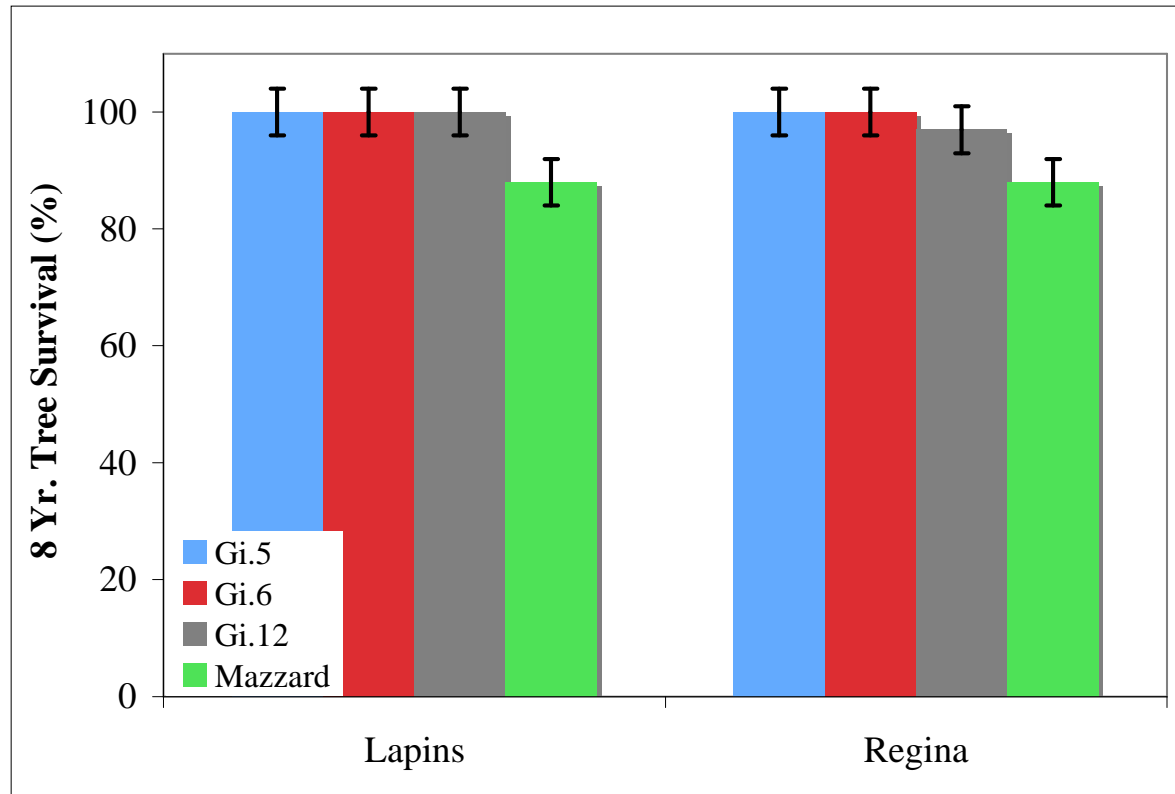
Terence Robinson de la Universidad de Cornell en NY, ha evaluado por 8 años el portainjerto Gisela 12 con las variedades Lapins y Regina, comparando su efecto sobre:

- Supervivencia de los árboles
- Tamaño de árbol
- Calibre de la fruta
- Productividad
- Eficiencia productiva
- Rentabilidad

Todos estos factores se comparan con los portainjertos Gisela 5, 6 y Mazzard después de 8 años de información acumulada.



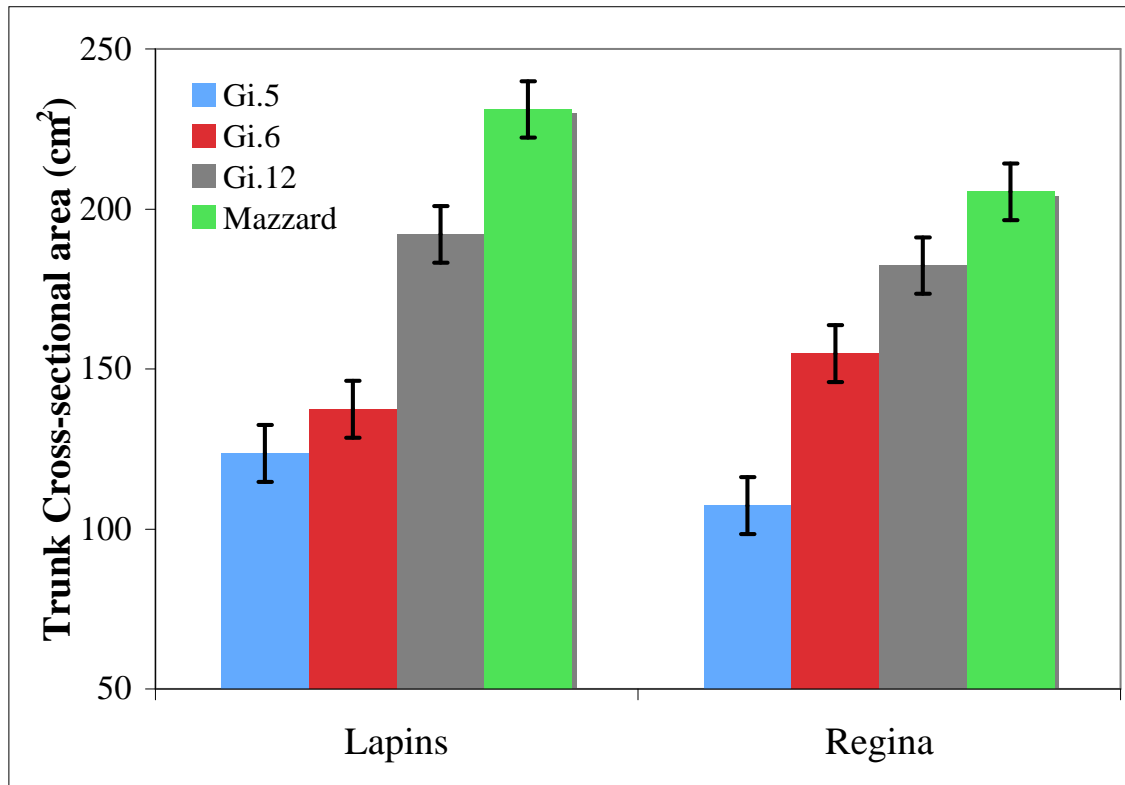
Tree Survival



No hay gran diferencia entre la sobrevivencia de los 3 Giselas y todos son mejores que Mazzard.

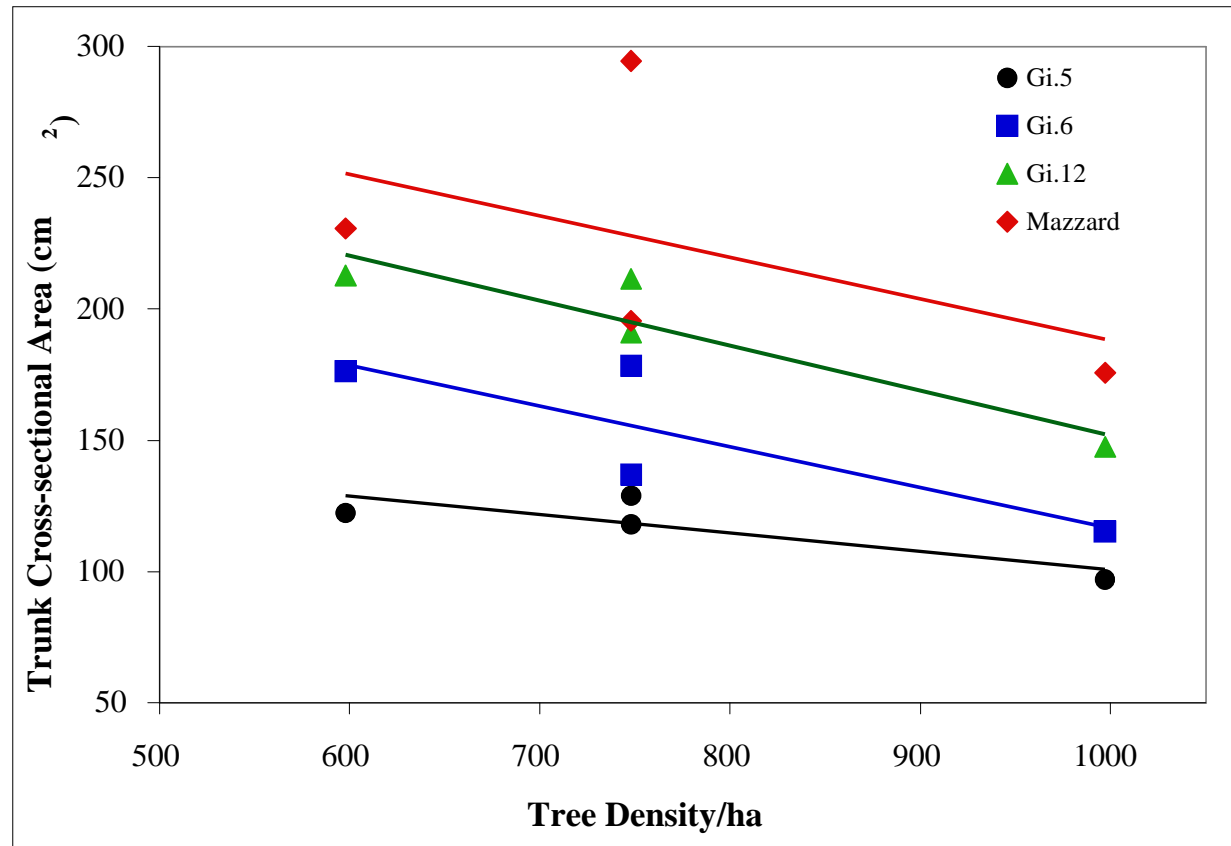
Source: Terence Robinson, Cornell University, NY.

Tree Size



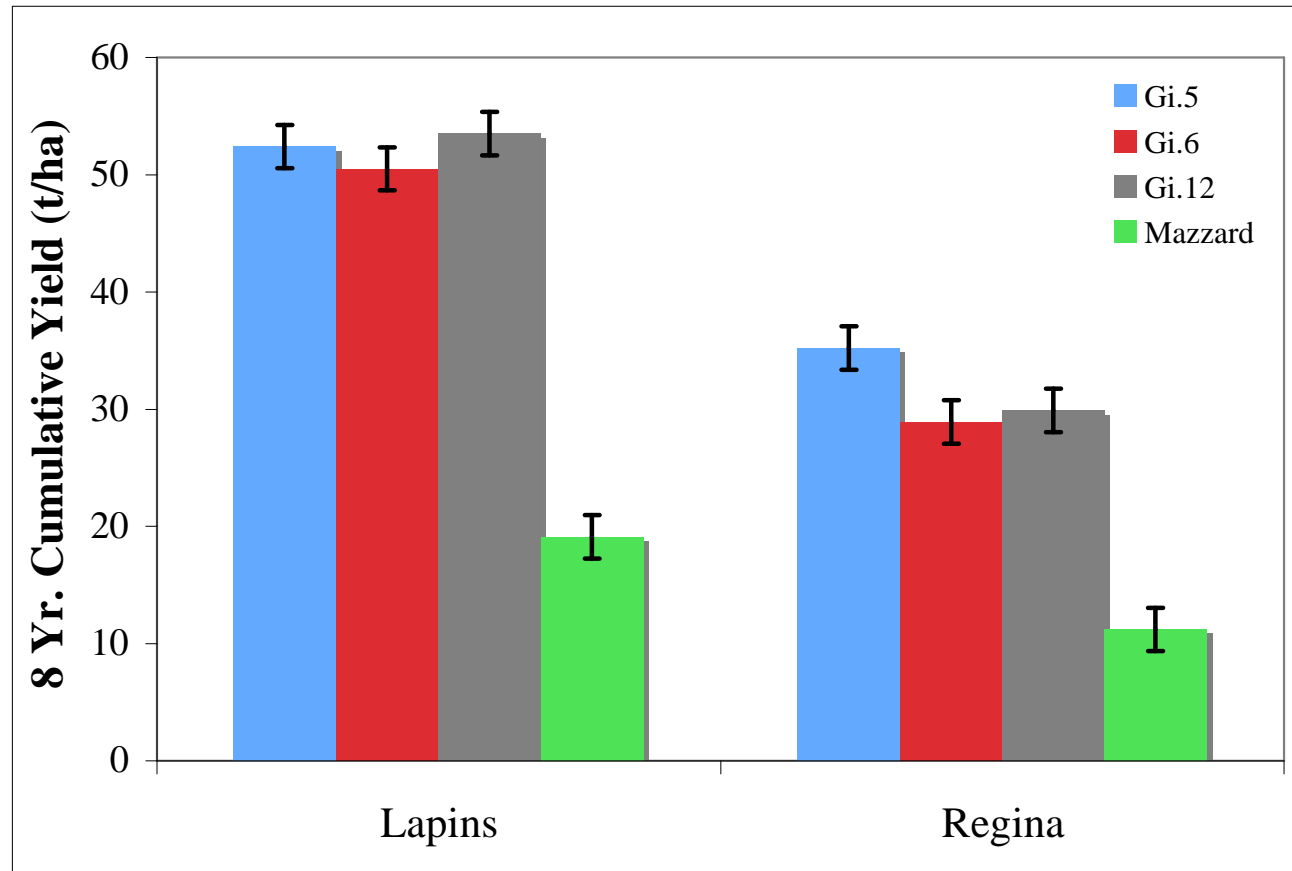
Source: Terence Robinson, Cornell University, NY.

Effect of Tree density on Tree Size



Source: Terence Robinson, Cornell University, NY.

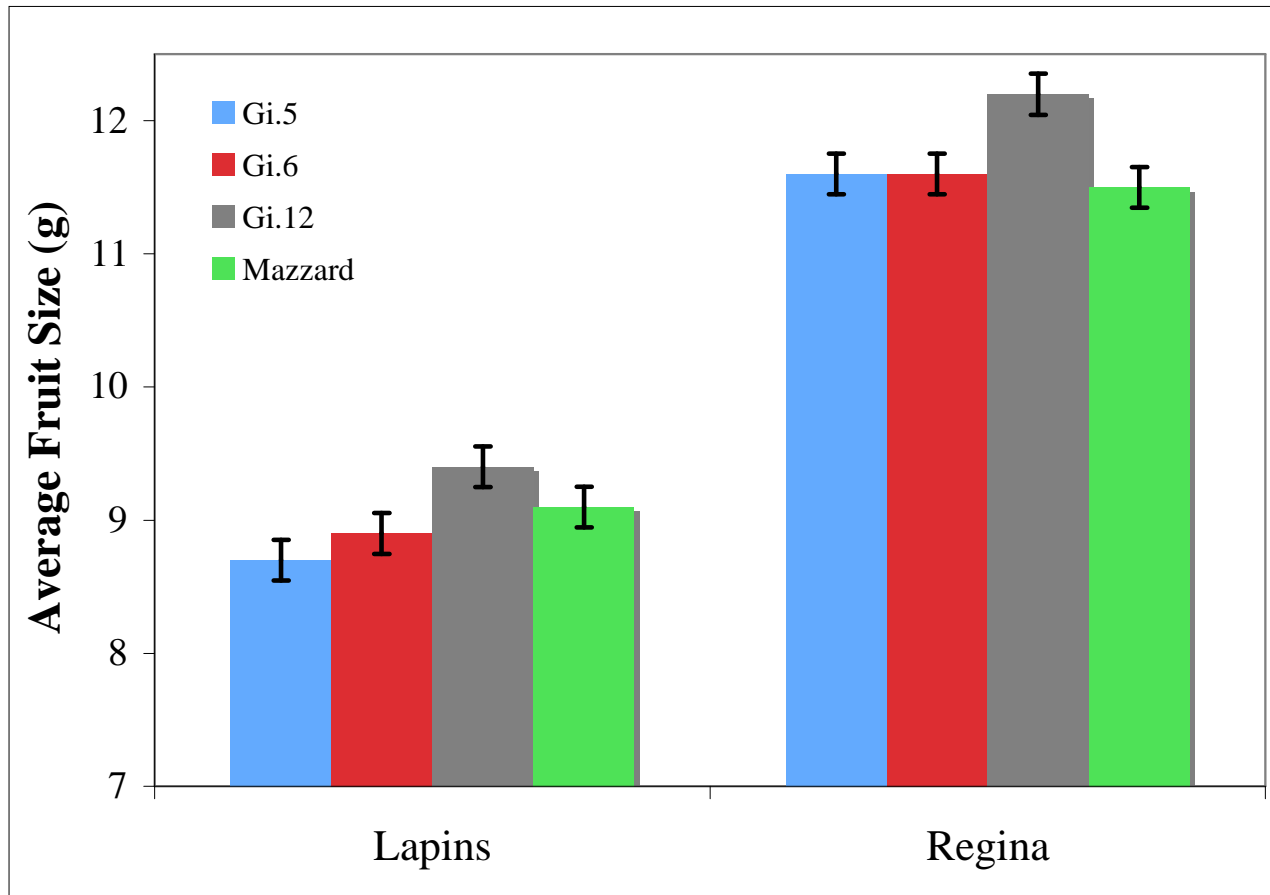
Production



8 Year-old Trial

Source: Terence Robinson, Cornell University, NY.

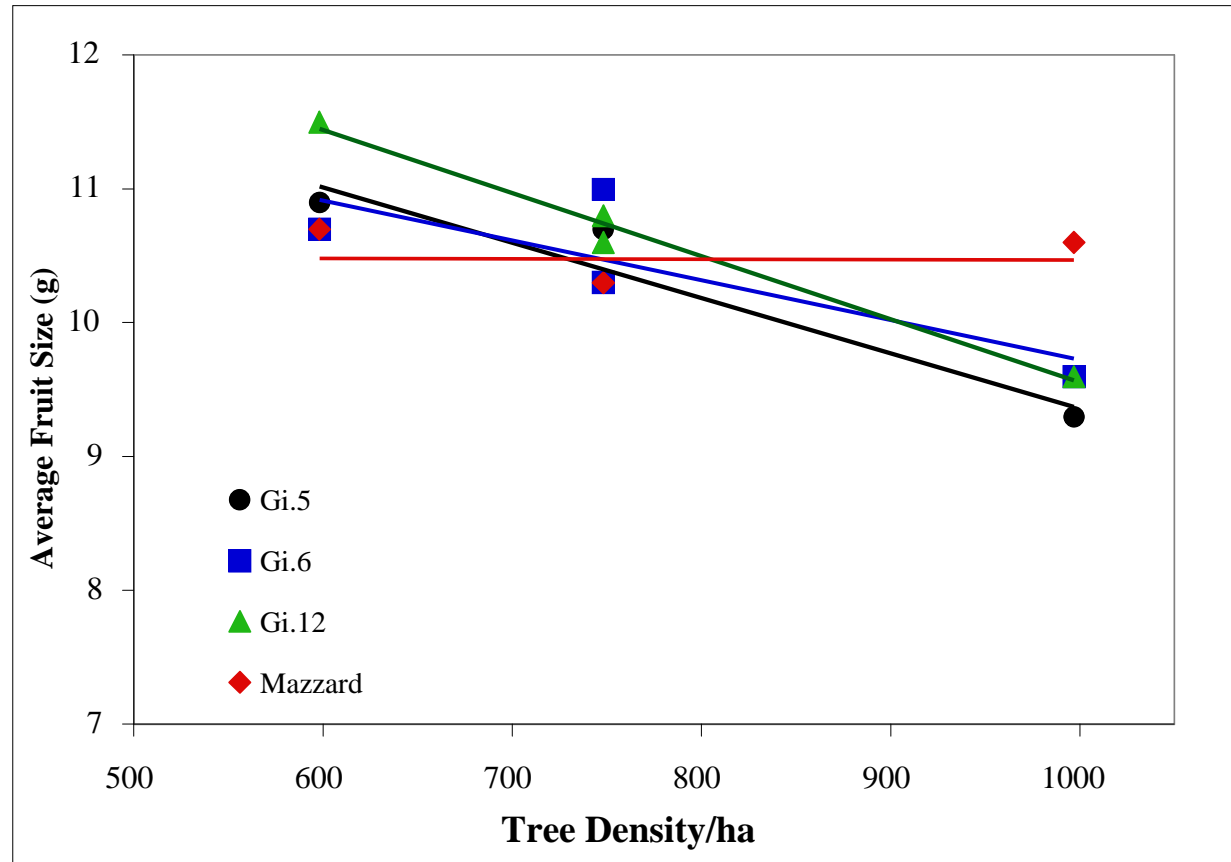
Fruit Size



El calibre de la fruta es un factor que diferencia a Gisela 12, consistentemente durante 8 años este portainjerto da mas calibre que Gisela 5, 6 y Mazzard

Source: Terence Robinson, Cornell University, NY.

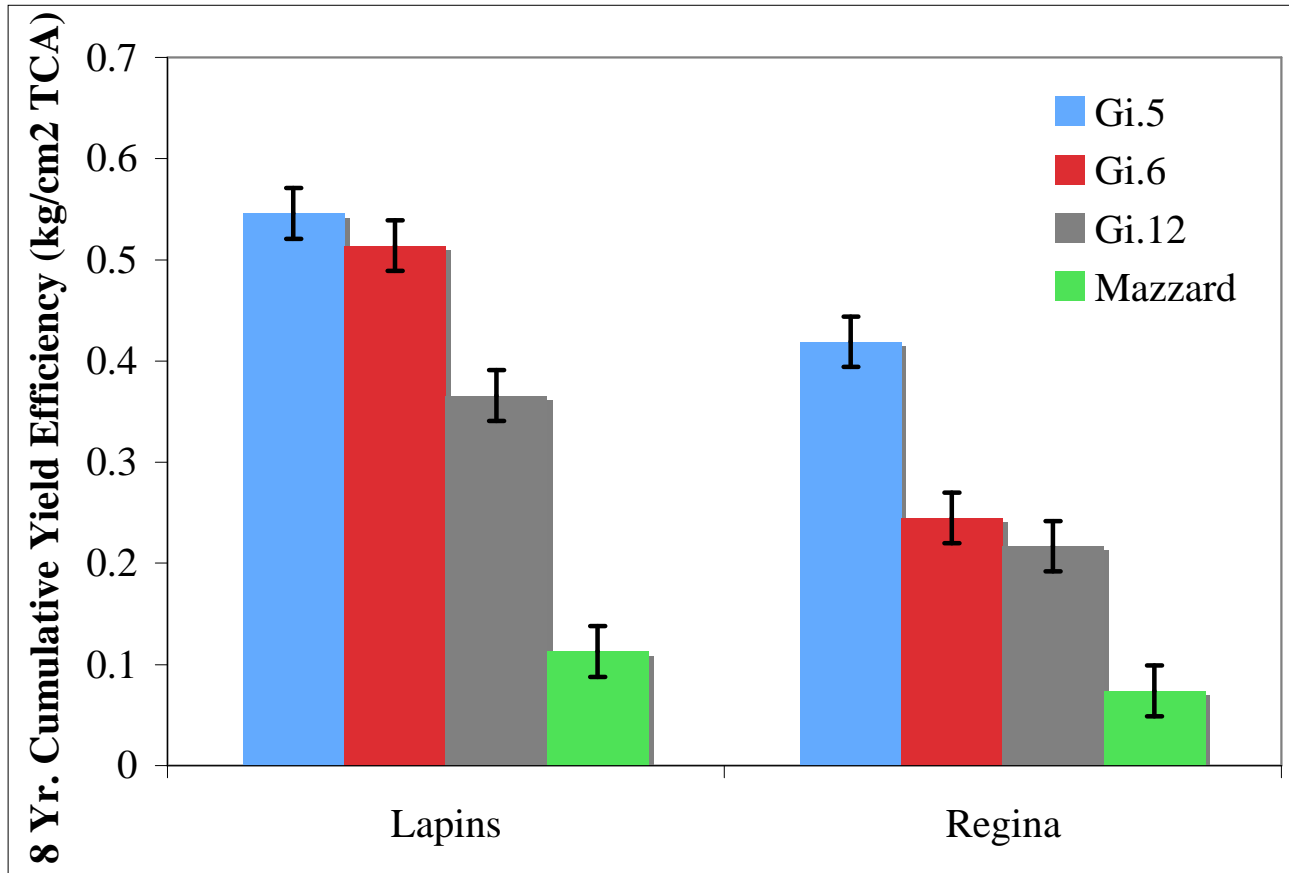
Effect of Tree density on Fruit Size



Gisela 12 es el portainjerto que presenta mayor calibre de fruta, incluso cuando se aumenta la densidad de plantación.

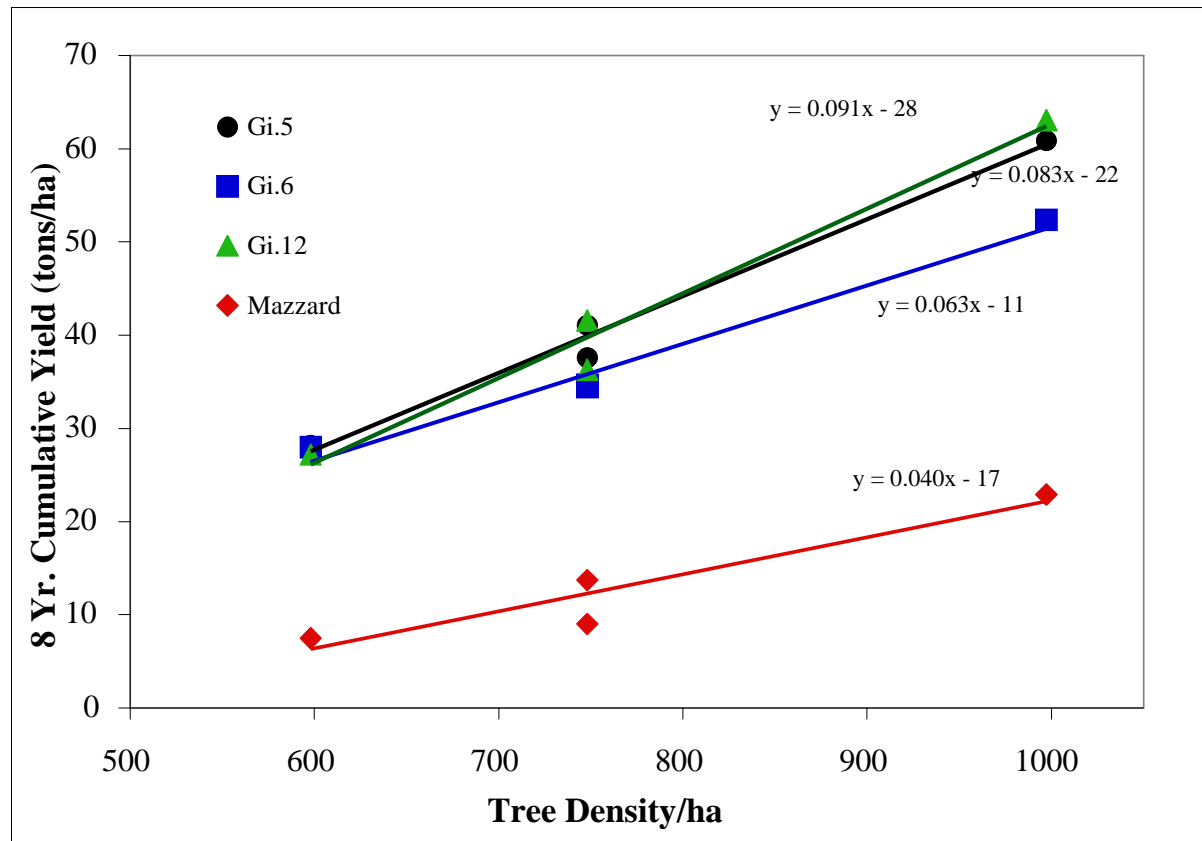
Source: Terence Robinson, Cornell University, NY.

Yield Efficiency



Source: Terence Robinson, Cornell University, NY.

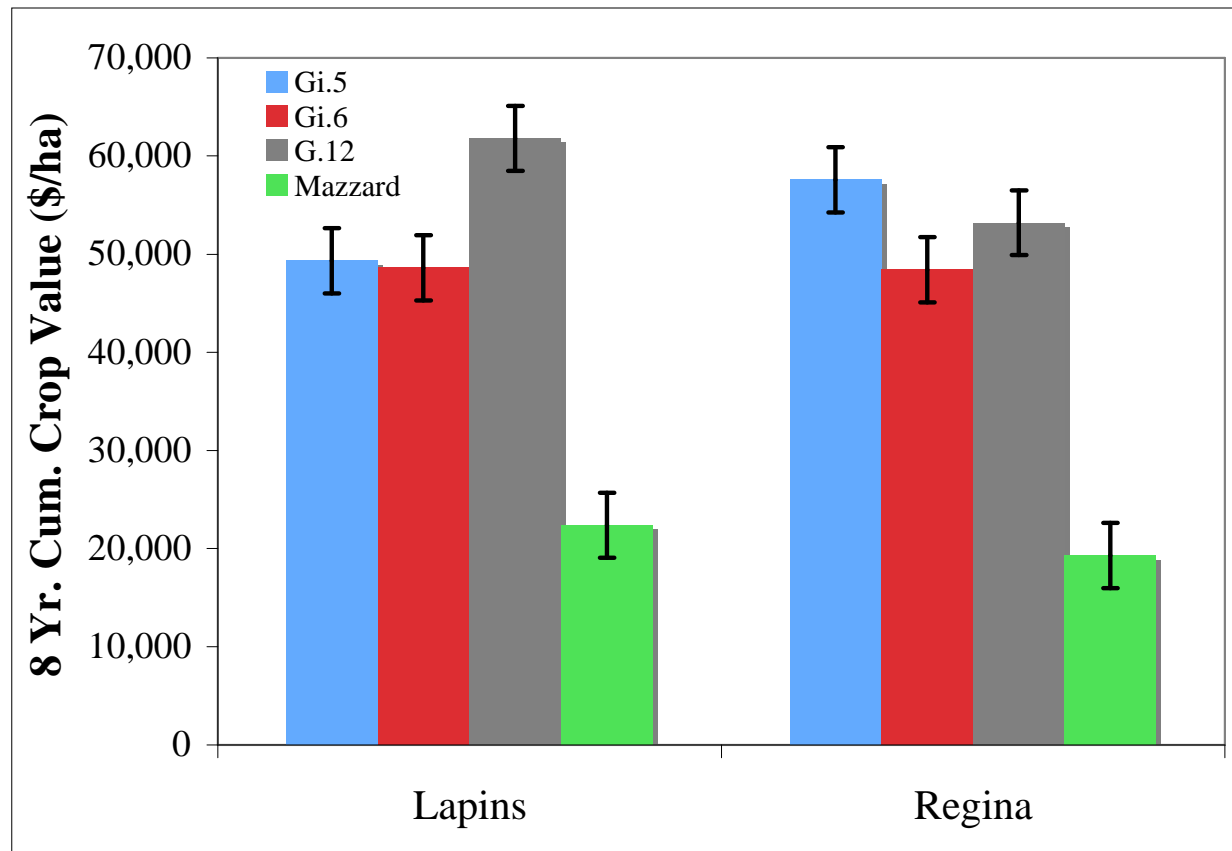
Increasing Tree Density Improves Cumulative Yield Dramatically



8 Year-old Trial, 40-90 kg/additional tree

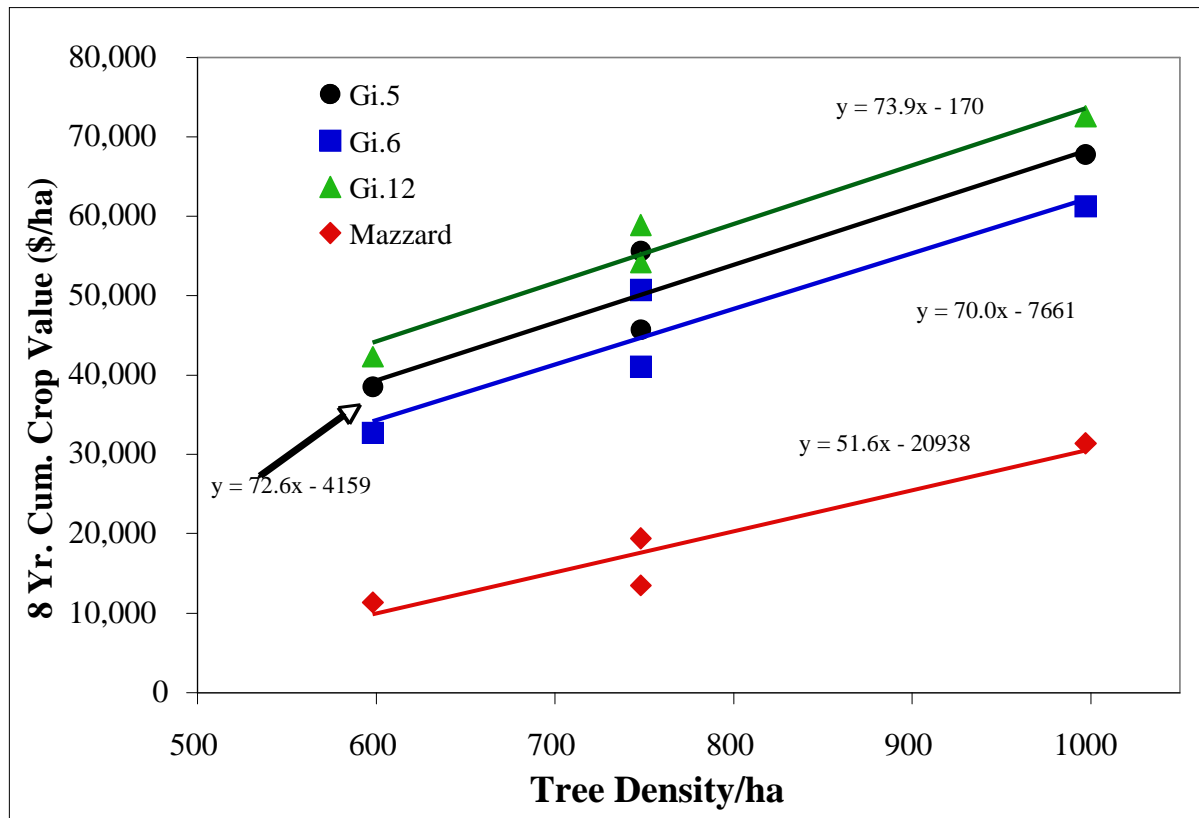
Source: Terence Robinson, Cornell University, NY.

Crop Value



Source: Terence Robinson, Cornell University, NY.

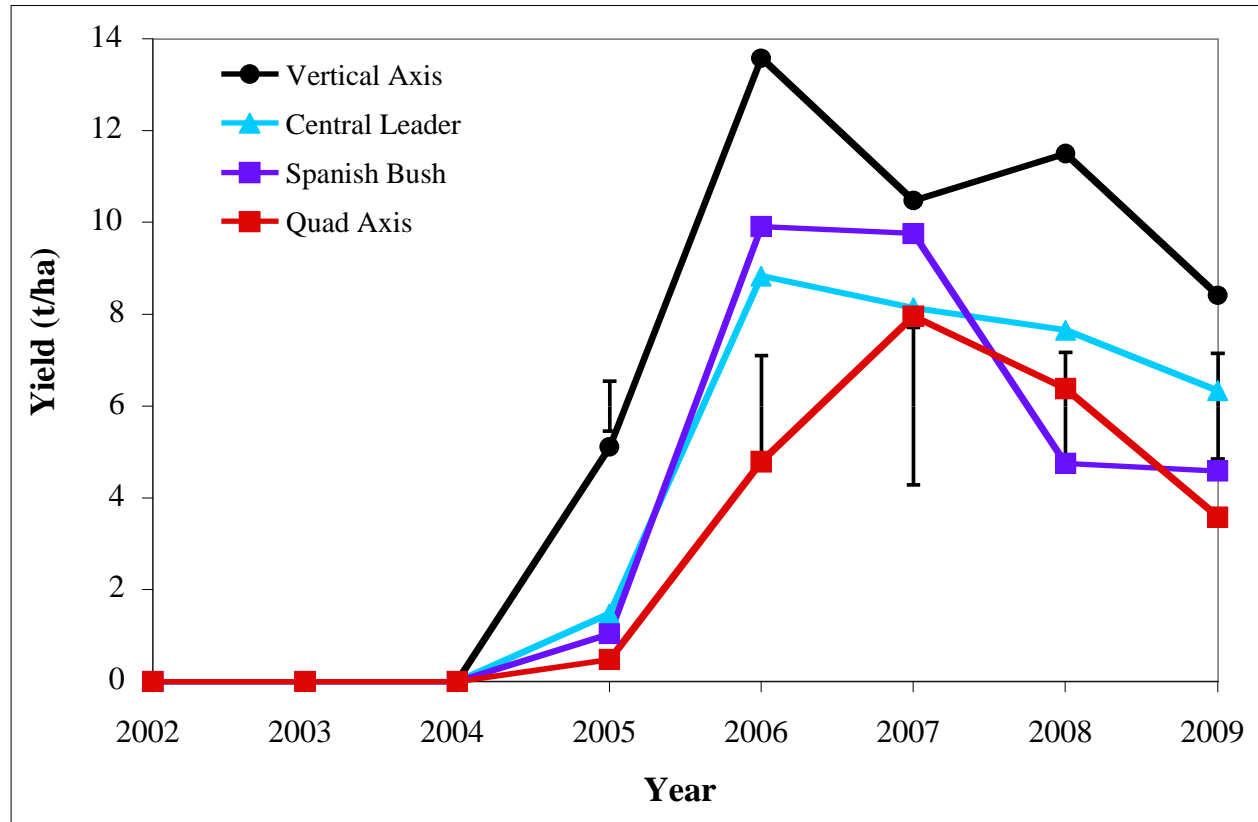
Increasing Tree Density Improves Gross Returns



8 Year-old Trial
\$52-74/additional tree

Source: Terence Robinson, Cornell University, NY.

Orchard System Yield Performance



Source: Terence Robinson, Cornell University, NY.

Conclusions on Dwarfing Rootstocks

- **Gisela 5**
 - Trees on Gi.5 are about 60-65% the size of trees on seedling rootstocks.
 - Trees on Gisela 5 are 2.5 times as productive as trees on seedling stocks.
 - Trees on Gisela 5 should be planted at densities from 400-800 trees/acre.
 - Irrigation is essential.
 - Aggressive crop load management is required.
- **Gisela 6**
 - Trees on Gi.6 are about 70-80% the size of trees on seedling rootstocks
 - Trees on Gisela 6 are 2-2.5 times as productive as trees on seedling stocks
 - Trees on Gisela 6 should be planted at densities from 300-500 trees/acre.
- **Gisela 12**
 - Trees on Gi.12 are about 80-90% the size of trees on seedling rootstocks
 - Trees on Gisela 12 are 2.5 times as productive as trees on seedling stocks
 - Trees on Gisela 12 should be planted at densities from 300-500 trees/acre.
 - Productive with good fruit size



Source: Terence Robinson, Cornell University, NY.

En Oregon State University, Lynn Long ha evaluado Gisela 12 con resultados muy interesantes, los cuales se presentan a continuación:

Rootstock characteristics						
Tree Size	Percent	Precocious	Advance bloom/harvest	Compatability	Root Suckers	Anchorage
Colt	100	No	No	Good	No	Good
Gisela 5	50-60	Yes	2-4 days	Good	No	Fair-Good
Gisela 6	85-90	Yes	0-1 day	Good	No	Fair
Gisela 12	75-95	Yes	No	Good	No	Good
Krymsk 5	80-90	Yes	No	Limited data	Moderate	Good
Krymsk 6	65-70	Yes	No	Limited data	Moderate	Good
Mahaleb	90	Slightly	No	Good-Fair	No	Good
Maxma 14	90-100	Yes	No	Good	No	Good
Mazzard	100	No	No	Good	Low	Good
Source: Lynn Long, Oregon State University						

Gisela 12 (*P. cerasus* x *P. canescens*)

Tree vigor and size on Gisela 12 is variable depending upon cultivar combination. Several years of testing in The Dalles, Oregon, and Prosser, Washington, indicated that when combined with Bing, Gisela 12 produced a tree intermediate in size to Gisela 5 and 6. However, grower experience with Regina indicates that Gisela 12 produces a tree approximately 10 percent larger than Gisela 6. Some growers prefer the Regina/Gisela 12 combination, as they find it easier to maintain shoot growth and, ultimately, fruit size. It is both precocious and productive, producing early heavy crops, with full production possible by the fifth leaf. Good fruit size and quality is possible with proper pruning. Gisela 12 is adapted to a wide range of soils, and tree structure is open and spreading and new branches form readily.

Source: Lynn Long, Oregon State University



Lapins en Gisela 12:

- Presenta vigor similar a Gisela 6 o un 10% superior.
- Buen ángulo y buen calibre
- Puede ser auto soportante, no presenta diferencia de diámetro entre el tronco y la variedad.



Table A compilation of fruit size and tree yield on 4th through 6th leaf 'Bing' trees grown on several rootstocks in The Dalles.

Rootstock	6 th leaf trunk area cm ²	Cumulative Yield lbs/tree	<u>Average percent fruit size</u>			
			13 row	12 row	11 row	10row+
Mazzard	152.3	77.8	1.4	22.2	32.0	44.4
Gisela 5	93.2	110.0	1.4	19.1	30.3	49.2
Gisela 6	156.9	125.2	0.4	15.2	36.3	48.2
Gisela 12	114.5	126.1	0.9	17.3	33.7	48.1

Data by T. Facteau

Source: Lynn Long, Oregon State University



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