

BLACK WALNUT–LATERALLY FRUITFUL CULTIVARS

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Some eastern black walnut cultivars possess a characteristic known as lateral bud bearing. (Sparks, 1982) These cultivars produce pistillate flowers on a profusion of short, spur type branches distributed along main scaffold limbs. With this growth pattern, both leaves and nuts are born throughout the tree canopy resulting in increased yield potential. (Reid 1986)

To produce a black walnut cultivar for a commercial orchard, this characteristic is desirable and essential. In Persian walnuts, lateral bud bearing has resulted in significant yield increases. They also tend to be more precocious and are better suited to high-yielding and high-density plantings. (McGranahan, Leslie, Dandekar, Uratsu)

A cross breeding program needs to be done to develop a black walnut cultivar that will retain the lateral bud bearing characteristic. The resulting selection should also be anthracnose resistant, contain a kernel of at least six grams, crack out 40% kernel, and have a light colored kernel of excellent quality.

LATERALLY FRUITFUL BLACK WALNUT CULTIVARS

Cultivar Name	State	% Kernel	Grams/Nut	Anthracnose *	Reported By	Year reported resist.
Sparks 127	IA	37.4	17.3	MR	Archie Sparks	1982
Davidson	IA	28.0	21.5	R	"	1982
Crantz	OH	32.3	15.3	MR	"	1982
Beck	MI	31.5	13.6	R	"	1982
Pfister	NE	27.0	18.8	R	"	1982
Football	MO	30.0	19.6	MS	William Reid	1996
Emma K	IL	37.5	16.2	R	"	1996
Kwik-Krop	KS	31.0	17.4	MR	"	1996
Sparks 147	IA	38.0	18.4	MR	"	1996
Surprise	MO	34.0	19.9	MR	"	1996
Sauber	OH	33.0	16.9	R	Cyril Bish	1997
Vandersloot	PA	28.0	19.3	MR	"	1997
Hay #1	MO	32.0	19.2	R	Brian Sparks	

*R= Resistant, MR=Moderately Resistant, MS= Moderately Susceptible

LITERATURE CITED

- Gale McGranahan, Chuck Leslie, Abhaya Dandekar, and Sandie Uratsu, Breeding and Genetic Engineering of English Walnut for Nut Production. Univ. of CA, Davis, 37.
- Sparks, A. 1982. Lateral bearing black walnuts. Northern Nut Growers Association Annual Report. 73: 33-34.
- Reid, W. 1996. Evaluation and management of black walnuts for nut production. Knowledge for the future of black walnut – USDA General Technical Report NC – 191, 211-216.