Figs in the Pacific Northwest

Michael Bostock

INTRODUCTION

The common or edible fig (*Ficus carica*) along with the olive and the grape are the quintessential Mediterranean fruits. For exotic enthusiasts in the PNW, figs represent one of the easier Mediterranean plants to cultivate. In fact, the fig is quite capable of reaching grand proportions and large specimens can be readily found in major ethnic (Italian, Greek, Portuguese) districts of urban centers such as Vancouver. The elegant form of the fig, its smooth, slate gray bark, large leathery and iconic leaves are, for some, sufficient reason to include it within their gardens. Others, especially those who have had the pleasure of savoring figs in more southern climes seek to enjoy the luscious fruit in the same abundance that they are produced in Mediterranean regions. Despite the ease with which figs can be grown here, procuring a substantial fruit crop in the Pacific Northwest is more challenging and requires some knowledge of different cultivars, pruning and cultural practices. In what follows, I provide you with some of my thoughts on these subjects.

CHOICE OF VARIETY

The choice of variety involves consideration of 3 factors: size of breba (or first) crop, ripening time of main



Figure 1. A bowl full of the Pacific Northwest's premier breba-producing cultivar, Desert King, illustrating the grass green skin and rosy flesh. A large tree is capable of producing hundreds of fruit in late July through mid-August.

(or second) crop and last, but not least, quality of taste. To appreciate the different fig varieties, a brief summary of fig botany is required. Fig plants are "(gyno-)dioecious" and come in male and female forms, both of which produce flowers (or more properly "syconia" which contain the flowers) that are what we know as the fig's fruit or, simply,

within the male syconium of the caprifig. This wasp (Blastophaga psenes) does not survive outside of Mediterranean regions and so fig fruit in climates such as ours are sterile. As a result (and because figs do not reproduce true to their parents) they are multiplied exclusively by vegetative propagation (ie ``cuttings").



Figure 2. Lattarula breba crop figs. Figs are ripe when they begin to hang and develop cracks in their skin, as above. Some varieties will also exude a syrupy tear from their eye. Photo courtesy of Paul Khong.

``figs". The male form is also known as the "caprifig" (or "goat" fig in Italian) and produces resinous, pithy figs that are effectively inedible in most cases except perhaps for goats, hence the name.

Most fig cultivars that produce edible fruit are of the female form and, luckily for us, are parthenocarpic or at least partly so; that is, they do not require fertilization to set fruit. Fertilization involves pollination of female flowers by a special wasp that has spent the first part of its life cycle Female figs are classified in 3 types: Smyrna, San Pedro, and Common. Smyrna-type figs include the famous Turkish "Smyrna" and Greek ``Kalamata" varieties that appear in dried form in ethnic grocery stores after October. They require pollination by the fig wasp in order to ripen and so will not produce fruit in our climate. Note that the seeds in these dried figs are necessarily fertile and can be planted, although, the offspring are virtually certain not to set table-worthy fruit. San Pedro-type figs require pollination only to properly ripen the main crop but will ripen the breba crop without the aid of the fig wasp. Finally, Common-type figs are capable of ripening both breba and main crops without pollination.

Breba Crop Figs

In the BC Lower Mainland, Common and San Pedro type figs typically begin to ripen their breba crops between the 3rd week of July and 1st week of August depending on the weather, and continue **Desert King**: This is a San Pedro variety that produces a large number of breba fruit typically 4-5 fruit per shoot and sometimes up to 8-9 fruit per shoot. When ripe the skin is a light green with a rosy red pulp. The fruit is medium to large size (80-100 g) (see figure

fruit crop is desired. There are 3 or

4 cultivars that produce more plentiful

breba crops and so can be considered

for serious breba fruit production in the

Pacific Northwest; they are:



Figure 3. The croisic cultivar is actually a succulent male (capri-)fig. Although capable of producing an enormous quantity of early figs in the Pacific Northwest, its quality is only mediocre.

to do so for a period of about 3 weeks. The breba crop is the more reliable crop here as far as ripening is concerned, but unfortunately most cultivars only bear a small breba crop, typically less than 1 fruit per shoot. This low breba productivity characterizes many of the better known cultivars often found in nurseries such as Brown Turkey, Black Mission, Kadota (aka Dottato) and Brunswick. Consequently, these varieties, though familiar due to the presence of California summer imports in grocery stores, are not especially useful for home cultivation, if a significant 1). Most fig afficianados rate the taste of Desert King very highly, and so when both quality and quantity are considered, it is usually touted as the top choice for the Pacific Northwest.

Lattarula: Thought by some to be a bud sport of the variety "Blanche" aka White Marseilles to which it is similar, the lattarula fig purportedly carries a larger breba crop. Lattarula is another commonly grown fig in the Pacific Northwest. It bears fewer breba (2-3 per shoot) than Desert

King but large trees will still provide a bountiful harvest. The breba fruit are lemon-yellow skinned with a white pulp and large beige seeds, and of medium to large size (80-100 g - see figure 2). Fruit quality of Lattarula is considered by most to be distinctly inferior to that of Desert King, just as sweet but less rich.

Gillette: Also known as "Croisic", the Gillette variety is actually a succulent caprifig, but, although edible, it is rather insipid and only develops sweetness if it is left on the tree to the point of nearly rotting. Its skin is yellowish green



Figure 4a. Dauphine can produce very large fruit

(figure 3), with white pulp and a few distinguishing male flowers (in addition to female) can be found near the eye. This is the only fig commonly found in our parts that can compete with Desert King for productivity with 8-9 fruit per shoot commonly attained; however, as noted above it cannot be recommended

highly on account of its inferior taste.

Dauphine: This variety (reportedly a San Pedro type) comes from France and I am not aware of any mature trees in the Vancouver region. It is highly regarded in that country for the size and productivity of its breba crop, and is advertised as producing more breba figs (by weight) than main crop figs. The breba fruit are large to very large, between 100 and 200 g in weight (see figures 4 A,B from German enthusiast Roland Reineck), with handsome green tinged with purple skin and light

rosy pink flesh. I can attest to their fine flavour having sampled them in Montpellier markets. It should be trialed widely in the PNW as a potential competitor to Desert King as a copious producer of high quality breba figs. Its only potential disadvantage may be frost



Figure 4. The Dauphine cultivar is highly regarded in France on account of its large breba figs of up to 200 g and its high productivity; however, it is virtually unknown in the Pacific Northwest. These photos were provided by Roland Reineck of Karlsruhe, Germany, zone 7b.

hardiness as it is apparently more tender than some other figs with significant dieback at -10C or perhaps warmer (versus -15C for Desert King). Figure 4B suggests, however, that even in zone 7 (Karlsruhe, Germany) it is possible to get a bumper crop, at least in some years.

Main Crop Figs

Those who wish to extend their fig season beyond 3 weeks in late July and August will need to consider cultivars that ripen an early main crop. In most varieties, the main crop is the more abundant and tastier of the two crops but the challenge in our climate is to



Figure 5. Main crop figs of Marseilles Black VS. Although these figs are small, they are finely flavoured and will ripen at least a part crop in a Pacific Northwest summer. Photo courtesy of Paul Khong.

get main crop figs to ripen. In those regions which accumulate more than 1100 C (2000 F) degree days (in the Pacific Northwest, these regions include the Willamette Valley and perhaps the upper reaches of the Fraser Vallev) many varieties will ripen at least a

partial main crop. Below the 1100 C degree-day threshold (most of Puget Sound, Vancouver Island and the lower mainland), this objective is more difficult to realize. Lattarula is one variety that is capable of producing main crop figs in good years in this region. The main crop figs are similar to the brebas but smaller (50-80 g) with average flavour that deteriorates noticeably with the onset of cooler weather. Osborn Prolific is a dark purplish-brown skinned variety with white flesh that also is capable of producing main crop figs of medium size (60-90 g) in good years here and has a pleasant sweet taste (it is also capable of producing up to 1-2 breba figs per shoot). I am trialing 3 other varieties of excellent quality that are known to

ripen exceptionally early main crop figs in other regions and my hope is that they may prove to be reliable producers of main crop figs in cooler parts of the Pacific Northwest.

Black Marseilles VS: This is a small purple skinned fig with burgundy red flesh and a taste of raspberry. It was rediscovered a few years ago by a fig enthusiast (with initials VS) in New Jersey. It has been widely distributed throughout the North American fig enthusiast community on account of its frost hardiness, rich raspberry taste and early and reliable fruit maturation. The only criticism that can be leveled at this cultivar is that the figs are rather small, generally less than 50 g (see figure 5).

Pastiliere: Another variety hailing from France (Toulouse), Pastiliere is one of two very early ripening, high quality figs grown in Europe, where it is said to ripen up to 1 month prior to most other cultivars. It has a velvety, bluish-purple



Figure 6. These main crop figs of the French cultivar Pastiliere are particularly attractive with their bluish, velvety bloom (photo courtesy of Marcello Finocchiaro at www.planetfig.com).

thin skin with bright red pulp (figure 6) **PRUNING** and an often reddish stem. Although, not as sweet as other varieties, the medium-sized (50-60 g) figs are said to have a fine taste reminiscent of water melon. The tree has a dwarf form, and so is suitable for smaller gardens, and is noted for its cold hardiness.

Ronde de Bordeaux: The second of the 2 French figs reputed to mature early, Ronde de Bordeaux also ripens approximately 1 month ahead of most other figs in Provence. The figs are small, with dark purple skin and red pulp and, though small (30-40 g) are regarded to be among the finest tasting of European fig varieties (figure 7). Again, I can concur on the basis of 2 fruit produced on a

must be given space.

Pruning is an important consideration when trying to maximize fruit production and the strategy will vary according to whether one is pruning to maximize breba crop or main crop fig production. The breba crop is borne on the previous vear's wood and so one must take



1-year old tree this past Figure 7. The Ronde de Bordeaux fig is a vigorous September. Like Pastiliere, grower with distinctive, deeply lobed leaves. the tree is cold-hardy, but Both it and Pastiliere are known for ripening unlike that variety it grows an early main crop in France, about 1 month to large proportions and so ahead of most other cultivars, and so may prove successful in cooler areas of the Pacific Northwest (photo courtesy of Jordi Font Neare).

care in pruning, the objective of which is twofold: to maintain the tree at a manageable size (and fruit within easy reach) and to retain as much of last year's (fruiting) wood in the process. Some advocate a judicious thinning every year, whereby some of the previous year's wood is removed to maintain tree height and some is left to produce fruit in the current year. The wood that has been retained is then pruned in the following year. Another approach that I have practiced profitably is to pinch off terminal buds, twice per year, once in late March before the tree leafs out and once again in late July or early August. Pinching the terminal bud promotes branching, usually at several locations. lower on the branch and with a resulting concentration of fruiting wood for next year at lower levels than would otherwise have been the case. These branches tend to be shorter than shoots that are left untouched but often possess a comparable number of nodes from

whence the fruit buds emerge. Hence, this practice appears to promote a transfer of energy from wood production to fruit production and promotes outward over upward growth.

When pruning for main crop production, preservation of last year's wood is. in principle, no longer a consideration. Nonetheless, I would recommend preserving a significant proportion of last year's shoots together with intact terminal bud for leaf out in late April or early May. The reason is that the new shoots from these buds will develop more quickly than those from buds that must first emerge from pruned wood, with the consequence that main crop figs will ripen first from those shoots with terminal buds that are allowed to remain. Shoots that are pruned should generally be cut back to the first node of the previous year, since buds from last year's wood will develop more easily than those buds on wood from still



Locally grown exotic plants - all sizes from seeds to crated specimens available

earlier years. In addition, I bud pinch the terminal buds once in late July along with those of breba producing trees. The reason, once more, is to produce more fruiting wood at lower levels. Pinching the bud at this time of year also halts the active tip growth, and forces the plant to put more energy into ripening the already formed main crop figs, resulting in earlier maturation.

EXTENDING THE SEASON

There are a number of ways one can effectively extend the fruiting season for the main crop figs by a few weeks. Microclimate is obviously important and a southern exposure can make a big difference; in particular, a south facing wall or fence will reflect warmth during the day and to greater or lesser degrees into the night. If the fig is kept in a pot (figs make good pot specimens) and one has access to a greenhouse, one can gain several weeks of season by allowing the fig to break bud therein 2-3 weeks in advance of normal. It is not necessary to keep the fig within the greenhouse through the summer (though this will accelerate maturation to be sure). It suffices to move it outside once in-ground figs in the neighbourhood have fully leafed out naturally (say by early May). In similar manner, it may be possible to gain a few weeks time through the creation of temporary greenhouse shelters for in-ground trees in late March/April. Makeshift contraptions involving transparent plastic bags used for leaf collection and bamboo poles may result in spring-time frowns from your neighbours but these frowns will turn into smiles of anticipation in fall as your figs mature!

Toward the end of the main crop fig season (middle to end of October in our parts) it may be possible accelerate

maturation of figs that might have ripened had there been another week or two of good weather. As per ancient Mediterranean custom, one need simply daub the eye of the fig (the hole at the end of the fig, technically known as the "ostiole") with a drop of olive olive. The oil decomposes to ethylene to hasten ripening, often in a matter of 2 or 3 days. The taste quality of a fig ripened in this manner can vary, and in some varieties it is distinctly inferior to naturally ripened fruit. Toward the end of season, taste will tend to deteriorate in any case, so there is little to lose.

PROPAGATION

I will finish this article with several comments on propagation. As figs are mentioned. propagated vegetatively by cuttings. The simplest and most reliable route is to pull out any suckers that emerge near the base of a parent tree. Suckers will usually detach along with intact rootlets and can be potted immediately with near 100% probability of success. Springtime is best, but the hardwood/root at the sucker base will protect the cutting from rot if potting takes place in another season, even if rooting is delayed until spring. If there are no suckers, cuttings (from pruning, for example) will generally take with >80% probability if several simple steps are taken: 1) take cuttings as close to but before bud break as possible (ie end of March), 2) let the cuttings sit in water for 24-48 hours, 3) wrap the base of the cuttings in a moist paper towel and place in plastic (e.g. zip-loc) bag. 4) keep the cuttings in a warmish location (>18C or 64F). The cuttings should begin to callous within a week, with roots appearing in 2-3 weeks. Once root initials form, the cuttings can be potted up and kept out of direct sun until they begin to put on good growth. Typically, cuttings will manage to grow It is also possible to take green (summer) cuttings, preferably before the end of June. Make sure that the end of the cutting includes some of last year's wood, and strip off all but the end leaf. Place the cutting in a small (1-gallon) pot, with moist soil and prepare a minigreenhouse cover out of a plastic bag, elastic band and bamboo skewers. The success rates are smaller than for spring (hardwood) cuttings but with some luck a decent root system and 2 or 3 leaves will have developed to provide the plant with some sustenance prior to the onset of winter dormancy in late October.

MORE FIG INFORMATION

There are at least 2 good websites for figgish devotees. They are http://figs4fun.com and http://forums.gardenweb.com/forums/fig/ The former site, in particular, is frequented by many experts in fig cultivation and much can be learned by browsing the posts. The site also includes links to electronic versions of important fig literature, most notably the following works of Ira Condit and Gustav Eisen.

Condit, I.J., 1947, The Fig. Chronica Botanica Co., Waltham MA.

Condit, I.J., 1955, Fig Varieties: A Monograph, Hilgardia, 23:11.

Eisen, G., 1901, The Fig: Its History, Culture and Curing.

The best recently published material on fig cultivation is the French text (available on www.amazon.fr)

Baud, P. 2007, Le Figuier, Pas a Pas, Edition Edisud.



The World's Most Beautiful Agave

Nick Parker, Delta BC

On a warm sunny afternoon in the summer of 2006 I was strolling through Thomas Hobbs' attractive **Southlands** garden nursery in Vancouver, admiring his artistic touches everywhere. Hobbs, one of BC's most recognized horticulturists and authors, was there that day busily tending to his customers and his plants. I noticed a gorgeous, variegated agave in one of the greenhouses and I asked him what the price was. "That is my favourite plant", he told me firmly, "it's not for sale at any price." It was a 15-year-old *Agave americana* Medio-Picta Alba.

It is described by one California nursery as, "one of the prettiest and most sought after variegated succulents in existence". Another Santa Barbara website describes it as "a large dramatic plant ... a very pretty agave". I certainly

