

Notes from Vico Morcote

by Sir Peter Smithers

Readers of this publication, of such invaluable use to all growers of Magnolias, may recall that after the great hailstorm of 1984, which rained down stones here the size of golfballs, wrecked my greenhouse and did untold damage to every plant in the garden, I recalled my grandmother's oft repeated words: "My dear boy, these things are sent to try us." Well, it seems that it is not just a matter of a single trial; they come in bunches.

Our normal winter minimum temperature is -8° C, usually of short duration. Three times in the last fifteen years we have had -12° C. Once when this was accompanied by a strong north wind off the snows it defoliated but did not kill an exposed plant of *M. grandiflora* 'Exmouth.' Otherwise, no Magnolia here ever suffered from the cold. Last winter we had something which was not only a record since records were kept, but which would have been generally agreed to be unthinkable: a low of -17° C, that is to say, 2° F or thirty degrees of frost. It came in the most damaging form, in bright sun shining in the morning on the frozen trees, which had no covering of snow. Four feet of snow fell quickly soon afterwards, when it was too late to serve as a protecting mantle.

Well, when these things are sent to try us, we might as well learn as much as possible from the experience. So far as the 1984 hailstorm is concerned, the important lesson is the extraordinary vigour with which magnolias will callus wounds to the bark. In many cases the bark was removed from more than half of the circumference of a branch by the impact of an ice golfball. Yet today, unless one looks carefully, there is no remaining obvious result of the damage. The process of healing is nearly complete and no evil consequences, in the way of entry of

fungus or other horrors, seem to have materialised. Magnolias are indeed tough plants once they are established.

There seems to have been a local current of exceptionally cold air flowing down the hillside in one part of the garden, and in this cold stream some flower buds were damaged: the *Magnolia campbellii* hybrid 'Maharanee', *campbellii* 'Ethel Hillier' and the plant which came to us as *M. sargentiana robusta* dark form but was not, all carried some deformed flowers and the latter plant had a few dead twigs here and there. The conclusion is that Magnolias will stand a great deal of frost provided that their wood is thoroughly ripened by strong late summer sun, as was the case last year. In England, with such temperatures as we experienced, I suppose that a lot of plants would have been killed stone dead.

I was away when the cold struck, but bad news travels quickly, and I heard at once what had happened. It was difficult to imagine what the result would be. I thought it possible that we would have lost our *M. campbellii* and *M. sargentiana robusta* collections, perhaps preserving the *M. sprengeri* collection or most of it. The least to expect was the loss of a good many flower buds. In fact, the damage was slight, and we know now more or less what we can expect under such conditions. *Michelia doltsopa*, a Magnolia cousin, was almost killed outright. The large tree was planted against a wall, and that portion of it overtopping the wall is dead; only that portion of the trunk below wall level, and only on the side next to the wall, survived. This, however, is producing a vigorous forest of new growth. The dead top of the tree is being left for the moment and a plant of the new hybrid *Wistaria* 'Caroline' has been planted to clamber over it. *Michelia figo* in the same position was unharmed below

wall level. This has interesting implications for the new *M. doltsopa* × *figo* hybrids bred by Phil Savage and named for the late Jack Fogg. Possibly with their *figo* blood they will be marginally hardier than *M. doltsopa*. They certainly bloom at an earlier age. My *doltsopa* took nine years to produce a flower. A small graft of *M. × Foggii* 'Jack Fogg' has set numerous typical *doltsopa* buds covered with the beautiful russet silk down, for next year, in its second year of growth.

So far as damage to the Magnolias is concerned, the only physical harm attributable to the cold was split bark on *M. × 'Kew's Surprise.'* The bark showed a long split — about three feet — and was peeling away from the wood. I painted the wound with anti-fungal sealant, fixed a strip of wide scotch tape the length of the split to further exclude rain, and then put a tight whipping of horticultural twine from top to bottom of the split, right around the trunk. It was soon apparent that with the rising of the sap the trunk was swelling and the binding tightening, so that it did an increasingly good job of holding everything together. By the end of June I detected a ridge beneath the whipping which clearly indicated the process of callus formation beneath the bark. At this point the whipping was taken off, the Scotch tape removed, the loose bark cut back to where the callus was beginning, and the whole thing repainted with the anti-fungal paint. The tree looks very well and has grown normally. It is possible that the restriction of the sap flow may have prompted it into setting a first flower bud, but this is still uncertain at the date of writing.

Some readers may remember that also in 1984 my plant of *M. campbellii* 'Landicla,' certainly one of the most beautiful forms, developed very large and serious lesions on the trunk towards the middle of the summer. These lesions were running sap and the

fate of the tree seemed to hang in the balance. A local highly expert tree surgeon excised all infected bark and sterilised the cuts thus made, painting the whole with fungicide paint. In addition we injected the tree with both fungicides and antibiotics, using Mauget injectors. Although near ground the tree had lost almost 50 percent circumference of bark, it has callused very well indeed and has grown normally. Provoked by the reduction of sap flow into producing a very numerous first crop of flower buds, it failed to mature any of these satisfactorily, though this may have been due to the cold weather. This year there was a slight recurrence of the same malady, which was promptly dealt with, and a normal crop of flower buds has been set. Growth looks extremely healthy. So far the Cantonal Laboratory has not come up with any identification of the bacillus or fungus which attacked 'Landicla.'

This year the Magnolia blooming was very satisfactory with the exceptions noted above. Then a hot summer with a reasonable amount of rain gave us extremely fine growth. Then came August with record heat for this climate: day after day at 33°C, though always down to 22°C at night. This weather broke with a local windstorm of quite exceptional violence, which destroyed my tree of *M. campbellii* 'Veitchii,' coming up to flower for the fourth year, and broke some branches off other trees. Much damage was done to the roofs of houses in the village nearby. The interesting lesson from this experience consists in the advantage of growing Magnolias in community. If our trees had been standing as isolated specimens, there is no doubt at all that several of them would have been blown flat. As it is, growing in community they afforded one another a considerable degree of shelter and mutual support. Interestingly enough, *M. campbellii* 'Veitchii' was one of our

few isolated specimens and thus caught the full force of the storm.

Each year we flower a few new Magnolias for the first time, and we learn more about others. It is interesting that the magnificent 'Iolanthe,' the hardiness of which has not been established, was quite unharmed by the intense cold and put on a stunning display of its huge flowers. The very high quality of 'Joe McDaniel,' 'Pickard's Ruby,' 'Manchu Fan,' 'Pickards Opal,' *soulangiana* 'Burgundy' and *denudata* 'Forrests Pink' is again confirmed. 'Pickards Stardust' and 'Pickards Schmetterling' look promising. A 32-petal pink *stellata* which is an improvement in its pink colour over *M.s.* 'Chrysanthemumiflora' confirmed a very favourable if tentative impression of previous years. A first blooming of the Gresham 'Sulphur Cockatoo' was something of a disappointment: perhaps Gresham's genius for attractive plant names carried him away! We shall see. Elsewhere in this publication I have reported the interesting visit of Mr. Michael Lear to this garden when he was able from an encyclopaedic first-hand knowledge of the type trees of the *campbellii/sargentiana/sprengeri* group growing in England, to put some parentages to the plants received here under clonal names to which they had no title at all.

As for the mystery of the seedlings of *M. wieseneri* in this garden, a majority of them now show a marked resemblance to *M. hypoleuca*, both in leaf and in habit, while one resembles *M. wieseneri*. A plant of *M. hypoleuca*, it will be remembered, grows close by our *wieseneri*. It would help greatly if we had photographs of Mrs. Polly Hill's plant which also sets seed, together with information as to any seedlings raised from it by members of this Society from the distribution of her seed.

"And so, Holmes, the cat is out of

the bag, is it not? It is the nearby plant of *M. hypoleuca* which is involved."

"But, my dear Watson — you pardon sir, Wiesener — what if there be more than one cat in the bag?"

In fact, in a learned and fascinating letter to me, our colleague, Mr. K.E. Flinck, proposes that there might be any one of four cats, as follows:

1. It can be an apomictic fruiting. Not probable with seedlings showing quite good vitality. (Very good except for one. P.S.)

2. Most older plants of *M. 'Wieseneri'* are grafted. In some instances the understock takes over and fruits. (This is definitely not the case on my plant.)

3. It can be a pollination from another Magnolia. This should give uniform seedlings. (But then, my seedlings are not uniform.)

4. It is a true self-pollination. This is at least very rare and should not result in uniform seedlings.

To my mind cat No. 4 seems the most likely. With the exception of Mrs. Hill's plant, about which we lack information, seeding of *M. 'Wieseneri'* is indeed so rare as to be almost unknown. If my single pod of seed was indeed a self-pollination, then the hybrid origin of *M. 'Wieseneri'* would be proven and from the characteristics of the seedlings it seems that *M. hypoleuca* must have been one of the parents. However, until the plants have been examined in leaf by a taxonomist, I remain open to conviction on this point. Meanwhile, leaf material was taken by me to Brooklyn Botanic Garden in June for chromatographic studies. At this writing there is no information as to their outcome.

In his letter to me, Mr. Flinck lists experiments carried out by other members of our Society with *M. 'Wieseneri.'* It would be valuable to have some account of them in this publication.