

epoxide (Table 1). Carotenoid content probably could be correlated with the suffusion of yellow color in tepals. Purple-flowering magnolias such as *M.* × ‘Susan’ and *M.* × BBG #149, which have little or no yellow coloring, had correspondingly low amounts of carotenoids (Table 1).

M. acuminata, one of the parents of *M.* × ‘Elizabeth,’ has a very high carotenoid content. Its content of lutein-5,6-epoxide is greater than 10 times the amount found in *M.* × ‘Elizabeth’ (Table 1). Additionally, *M. acuminata* has several other pigments which were not identified in *M.* × ‘Elizabeth,’ including chlorophyll and possibly carotene.

Conclusion. The data presented are not sufficient to explain pigment inheritance in yellow-flowering magnolias, but they do support the contention that HPLC can be used to detect differences in pigment composition among species and hybrid cultivars. We are continuing our research on the HPLC of magnolia flower pigments. We hope to accumulate enough data to (1) elucidate pigment inheritance in magnolia and (2) distinguish species and hybrid cultivars from each other by chemical “fingerprinting.” The results presented here are preliminary and should not be construed as conclusive.

LITERATURE CITED

- Demuth, P., and F.S. Santamour, Jr., 1978. Carotenoid flower pigments in *Liriodendron* and *Magnolia*. *Torreya* 105(1): 65-66.
- Eskins, K., and H.J. Dutton. 1978. Sample preparation for high-performance liquid chromatography of higher plant pigments. *Anal. Chem.* 51(11):1885-1886.
- Koerting, L.E., C. Specht, and S.K-M. Tim. 1979. ‘Elizabeth’ magnolia. *HortScience* 14(2):195.
- Koerting, L.E. 1981. Introducing *Magnolia* × ‘Yellow Bird.’ *Magnolia* 27(2):30.
- Santamour, Jr., F.S. 1965. Biochemical studies in *Magnolia* I. Floral anthocyanins. *Bull. Univ. Penna. Morris Arb.* 16:43-48.

M. salicifolia ‘Iufer’

This fine clone, though mentioned often, has never, so far as I can determine, been depicted in *MAGNOLIA*. We now take the opportunity to correct this neglect with two photos supplied by Frank Mossman of Vancouver, Washington.

M. ‘Iufer’ is priced at \$45.00 in the Gossler catalogue and is described as having “superb white flowers with stamens tipped red. This is a small tree believed to be a hybrid of *M. salicifolia* and *M. kobus*. Ernest Iufer grew this fine plant for many years. Our tree grows in the form of a large Christmas tree and carries hundreds of white flowers in Spring. Our tree is over 30 years old and is only 15-20 feet tall.”

