EVALUATION OF MUSCADINE GRAPE CULTIVARS

FOR PRODUCTIVITY, FRUIT QUALITY,

AND WINTER HARDINESS IN ARKANSAS, 1987–1998

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TABLE OF CONTENTS

Introduction ................................................................................................................. 1
Materials and Methods .............................................................................................. 3
Results and Discussion ............................................................................................. 5
Conclusions ............................................................................................................... 14
Literature Cited ......................................................................................................... 15

Tables

1. Muscadine cultivars and selections, fruit color, flower type, origin, primary
   use, and year planted in the cultivar evaluation at the Fruit Substation, Clarksville
   ............................................................................................................................ 16

2. Minimum winter temperatures occurring at the Fruit Substation, Clarksville, 1986
   through 1998 ..................................................................................................... 17

3. Muscadine cultivar yields (lb/vine) at the Fruit Substation, Clarksville
   ............................................................................................................................ 18

4. Muscadine cultivar berry weights (g) at the Fruit Substation, Clarksville
   ............................................................................................................................ 20

5. Muscadine cultivar soluble solids (%) at the Fruit Substation, Clarksville
   ............................................................................................................................ 22

6. Harvest date and ratings for berry attachment scar, evenness of ripening, flavor,
   appearance, and overall quality for muscadine cultivars and selections, Fruit Substation, Clarksville
   ............................................................................................................................ 24

Conversion Table ..................................................................................................... 26
IMPACT STATEMENT

Muscadine grapes are adapted to all areas of Arkansas except the more northern counties, where vines can be killed by low winter temperatures. Muscadines are grown for both home and commercial use. An array of cultivars have been developed by a number of public and private organizations. No breeding work is currently being conducted by the University of Arkansas, but cultivar evaluation at the Fruit Substation, Clarksville, yielded results for 1987 through 1998. The goal was to discover which cultivars or selections from both public and private institutions are best suited for the Arkansas climate. Data collected from the replicated trial at Clarksville included yield, average berry weight, percent soluble solids, other quality components, and observations on disease susceptibility and winter hardiness. ‘Fry’, ‘Carlos’, ‘Cowart’, ‘Jumbo’, ‘Sugargate’, and ‘Summit’ are older cultivars (released prior to 1980) that performed adequately in the trial, and of those tested and released in the early to mid-1980s, ‘Nesbitt’, ‘Sterling’, and ‘Doreen’ provided positive results. Among the newer cultivars (released from 1986 to 1994), ‘Darlene’, ‘Tara’, ‘Black Beauty’, and ‘Southern Home’ show promise. Growers should consider choosing among these cultivars in future planting considerations.

KEY WORDS

_Vitis rotundifolia_, viticulture, variety testing, winter hardiness.

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