

COMPARISON of RASPBERRY VARIETIES AS FRESH FRUIT and for FREEZING PREPARATION

Total Acid
1.02%
Ascorbic Acid
mg/100gm 20.60
Wt. per 50
Berries (gms.)
112

BRISTOL

Total Acid
.95-1.25
Ascorbic Acid
29.19-34.72
Wt. 117

CUMBERLAND

Total Acid
1.20-1.25
Ascorbic Acid
11.56-40.80
Wt.-109

LOGAN

Total Acid
.86-.97
Ascorbic Acid
21.02-23.68
Wt. 127

MORRISON

Time of Ripening	Midseason	Late Midseason	Early Midseason	Late
Suitability for Freezing	Average	Good	Very Good	Good
Remarks:	Very Seedy, Tough Texture, Fair Flavor	Seedy, Good Texture, Color and Flavor	Seedy, Good Color, Flavor & Texture	Seedy, Good Color, Flavor & Texture

Recommended Treatment for Freezing: Whole with 30 Percent Syrup

BLACK RASPBERRIES

Total Acid
1.98-2.21
Ascorbic Acid
15.26-30.52
Wt. 129

Total Acid
2.14-2.45
Ascorbic Acid
14.97-27.25
Wt. 161

Total Acid
1.00-1.32
Ascorbic Acid
15.83-22.89
Wt. 126

Total Acid
1.78-2.32
Ascorbic Acid
40.33-42.95
Wt. 134

Total Acid
1.48-1.97
Ascorbic Acid
36.60-56.52
Wt. 135

Time of Ripening	Midseason	Late	Midseason	Late	Early Midseason
Suitability for Freezing	Very Good	Very Good	Average	Good	Good
Remarks:	Good Flavor & Color, Soft Texture	Good Flavor & Color, Soft Texture	Fair Color, Good Flavor, Soft Texture	Good Color & Flavor, Soft Texture	Good Color & Flavor, Soft Texture

Recommended Treatment for Freezing: Whole with 50 Percent Syrup

PURPLE RASPBERRIES

RED RASPBERRIES

Ohio Station Tests Yield and Processing Qualities of Nine Raspberry Varieties

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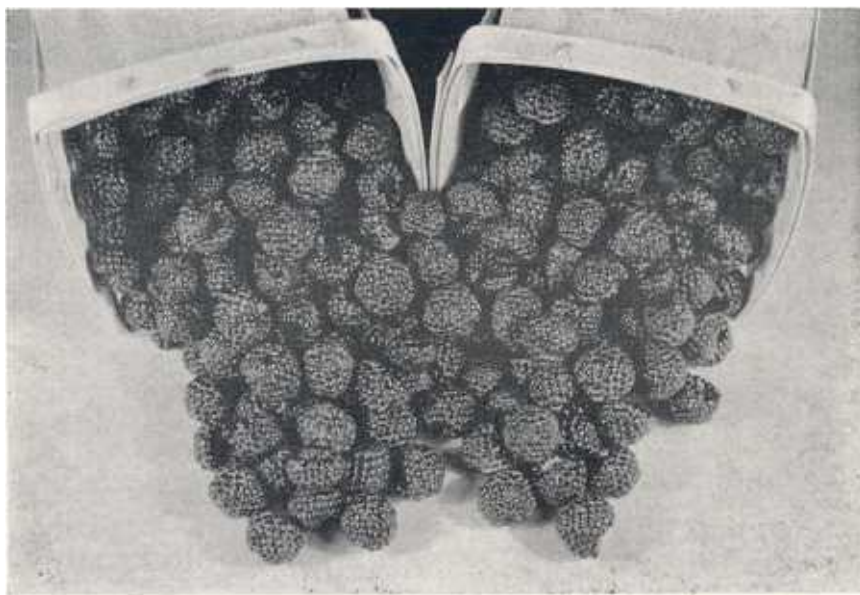
Nine varieties of red, black and purple raspberries have been evaluated at the Ohio Agricultural Experiment Station during the past several years. The quality and quantity of the fresh fruit was ascertained and the suitability of these varieties for freezing preservation was determined. In addition, methods of preparing these fruits for freezing were studied.

Red Raspberries

Because of the pleasing flavor and attractive red color, this fruit is generally desirable for freezing.

Ripening during the first part of July, this fruit is larger than black raspberries, but smaller than the purple fruit. Red raspberries have a tart flavor due to the relatively high acid content. Because of this, the flavor of the frozen fruit is enhanced as the acidity blends well with the sugar syrup used. Due to the good vitamin C content, red raspberries can supply a large part of the daily requirement of this important vitamin.

The main objection to red raspberries as a frozen product is their



These early maturing black raspberries of the Logan variety are very popular for freezing. The fruit is usually of uniform size and firm textured.

soft texture. When completely thawed, there is a considerable tendency for the drupelets to separate, giving a mashed appearance to the pack.

Three varieties of these raspberries have been under test. A brief description of these follows:

Taylor

This variety ripens two to four days before Latham. The fruit is large, long conic, with a pleasing color and desirable flavor. The plant is vigorous, erect, tall growing and is reasonably productive. The frozen fruit possesses an excellent flavor and a bright red color. The over all quality is good as a frozen product.

Latham

Fruiting over a relatively long period, this productive mid-season variety is very popular in Ohio. The fruit is medium sized with good flavor, color and texture. Latham does not produce as high a quality frozen product as Taylor because of a bleached appearance on thawing. However, because of an excellent flavor, this variety makes an acceptable frozen product.

Milton

Because it ripens several days after Latham, this variety can extend the picking season. However, Milton is not as vigorous or productive as the other varieties. This large sized fruit is good for freezing as it has a bright red color and a pronounced flavor.

Black Raspberries

This fruit usually ripens during the last part of June and the first of July. Black raspberries generally produce smaller and firmer fruit than the other raspberry types. However, they are more productive than red raspberries. The vitamin C content of this fruit is not as high as red raspberries, but black raspberries can supply a good part of the daily requirement of this vitamin.

Because of the firm texture and pronounced flavor, black raspberries are very popular for freezing. Their main disadvantage is that they are quite seedy. However, this characteristic can be minimized if the fruit is properly handled. It is not necessary to use as high a sugar content syrup as black raspberries do not have as high an acid content as the other raspberries. A description of the four varieties tested follows:

Logan

This variety is the earliest ripening, and most productive of those studied. The fruit is medium large, firm, bright and attractive. Logan is very good for freezing as it has a very attractive color and pronounced flavor. In addition, the fruit retains its shape well after freezing. Because of these characteristics, Logan is probably the best black raspberry for freezing.

Bristol

Ripening a few days later than Logan, this variety produces a med-

ium large, firm, bright fruit. Because it produces an excessively seedy product, with a fair flavor, Bristol is only a fair quality fruit for freezing.

Cumberland

This fruit ripens four to six days after Logan. Cumberland produces a larger fruit than either Logan or Bristol, but is not as productive. Because it has good texture, flavor and color, Cumberland is a good freezing variety. However, it does not hold up quite as well as Logan after freezing and thawing.

Morrison

This variety matures three to four days after Cumberland. The fruit is the largest in size of the black raspberries tested. Morrison produces a firm, attractive fruit that is desirable for extending the picking season. While this variety does not retain its wholeness quite as well as Logan, it is a good fruit for freezing. The color and flavor are quite pronounced.

Purple Raspberries

Maturing during the latter part of July, this raspberry is the most productive and is generally the largest fruited of the raspberries. This fruit, which closely resembles the red raspberry has a greyish-purple color and a unique flavor. In some areas, the unusual purple color and distinctive flavor are undesirable for the fresh fruit market. Purple

raspberries have the highest acid content of the raspberries tested. Because of this, the flavor of this fruit is quite tart. The vitamin C content is slightly lower than that of black raspberries.

Because of the unusual color and flavor of this type of raspberry, it makes a welcome addition to the list of frozen fruit. The principal objection to purple raspberries for freezing is the tendency to soften on thawing. However, this softening is not as pronounced as with red raspberries. A brief description of two purple varieties tested follows:

Marion

The latest maturing and largest fruited of any of the varieties tested, Marion ripens a week to ten days after the red variety Latham. The moderately firm, slightly conic, tart fruit holds its size well throughout the picking season. The plant is vigorous, resembling the red raspberry more than most purple varieties. Marion is very good for freezing because of the excellent flavor and attractive purple red color. It is slightly softer than Sodus after freezing.

Sodus

This medium large, firm, slightly conic, tart fruit matures a few days after Latham. Sodus outyields any of the raspberry varieties tested. The plant is exceedingly vigorous, making it a desirable variety where a market for its fruit is established.

Everbearing Raspberries

There is some limited interest in everbearing raspberries for production in Ohio. The everbearing fruit bears two crops each season; one during the normal June-July fruiting period, and the other from September until frost. There are no everbearing purple types and no satisfactory everbearing black raspberries. There are, however, several everbearing red raspberries that have performed well in Ohio. The outstanding varieties are: Indian Summer, an old variety, and two newer ones, Durham and September.

Freezing Methods

The best method for freezing raspberries will depend on the intended use of the fruit. If the fruit is to be used for pie filling, the use of dry sugar is acceptable. The usual ratio is one pound of sugar to four pounds of fruit. The sugar should be mixed with the fruit gently in order to minimize crushing and mashing of the fruit. Despite the ease of this method of preparation, it is not recommended as it produces a mushy appearing product. The dry sugar extracts excessive moisture from

the raspberries, making the fruit texture soft. In the case of black raspberries this treatment accentuates the seediness of the frozen product.

If a frozen product that can be used for a variety of uses is desired, the best method of preparing raspberries for freezing is to cover the fruit with a sugar syrup. A syrup helps to keep the fruit from mashing because it extracts less moisture from the berries. As it is not necessary to blend the syrup and fruit, damage to the texture is greatly reduced. To prepare raspberries this way, the fruit is packed into the freezer containers and enough pre-chilled syrup is added to cover the berries. Raspberries that are frozen in a syrup can be used for pie stock and in addition make highly desirable fruit.

To insure the highest quality product with either type of preparation, it is necessary to freeze the fruit as rapidly as possible and in a vapor and air tight package.—Reprinted from Ohio Farm and Home Research, Vol. 37, No. 274, Jan.-Feb., 1952. Ohio Agri. Expt. Station, Wooster, O.

