RUTGERS

New Jersey Agricultural Experiment Station

PLUM AND STONE FRUIT HYBRIDS

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PRUNUS DOMESTICA

• THIS PRESENTATION IS <u>NOT</u> ABOUT EUROPEAN PLUMS OR *PRUNIS DOMESTICA* LIKE STANLEY.







EUROPEAN PLUMS FOR NEW JERSEY

- EARLY SEASON EUROPEAN
 - EARLIBLUE
 - CASTLETON
- MIDSEASON EUROPEAN
 - MOHAWK
 - RICHARDS EARLY ITALIAN

- LATE SEASON
 EUROPEAN
 - ITALIAN
 - BROOKS
 - **BLUEBYRD**
 - VALOR
 - STANLEY
 - LONG JOHN
 - **BLUEFRE**



PLUMS SUGGESTED FOR NEW JERSEY

- EARLY SEASON ORIENTAL HYBRIDS
 - EARLY GOLDEN
 - METHLEY
 - SHIRO
 - BLACK RUBY

- LATE SEASON ORIENTAL HYBRIDS
 - SOUTH DAKOTA
 - RUBYQUEEN
 - FORTUNE

- MID SEASON ORIENTAL HYBRIDS
 - SANTA ROSA
 - RED ACE
 - VANIER
 - REDHEART
 - OZARK PREMIER





REASON FOR LACK OF A PLUM INDUSTRY IN NEW JERSEY

- PLUM RESEARCH THERE IS SO MUCH WE DON'T KNOW PARTICULARLY ABOUT FRUIT SET
- ORIENTAL PLUM HYBRIDS ARE HARD TO GROW NOT ONLY BECAUSE OF CONSISTENTLY POOR FRUIT SET BUT ALSO BECAUSE OF TREE LONGEVITY
- MANY ORIENTAL PLUMS ARE INTERSPECIFIC HYBRIDS SO IT IS DIFFICULT TO MAKE RECOMMENDATIONS ON POLLINATION WITHOUT RESEARCH. TREES ARE ALSO PROPAGATED REGULARLY ON PEACH, MYROBALAN, MARIANNA, *Prunus americana* and *Prunus intuitia* rootstocks both clonal selections and seedlings. Thus there are frequent cases of quick and slow decline related to incompatibility.













ORIENTAL PLUMS CAN BE FRUITFUL



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PLUOTS (PLUM X APRICOT)



OLDEST BLOCKS WERE FLAVOR DELIGHT, FLAVOR SUPREME, FLAVOR KING, FLAVOR QUEEN, AND FLAVOR RICH.

MOST HAVE BEEN VERY UNPRODUCTIVE, LOTS OF BLOOM FROM EACH OTHER AND WITH ORIENTAL BLOOMS, DON'T SEEM TO SET AT ALL,OR SET AND DROP HEAVILY.

FLAVORICH HAS BEEN THE MOST PRODUCTIVE WITH WEAK FLAVOR AND FLAVOR KING AND FLAVOR QUEEN ARE MUCH BETTER. EVALUATED FLAVOR DELIGNT APRIUM AND FLAVOR SUPREME PLUOTS BUT ONLY HAD TWO FRUIT IN SEVEN YEARS. ALWAYS USED APRICOTS AS POLLINATORS

HAVE MADE NEWER PLANTINGS OF PLUOTS AND APRIUMS WITH MORE PROVISION FOR CROSS POLLINATION WITH THE HOPE OF BETTER PRODUCTION. THERE IS MUCH MORE BLOOM AND SOME YEARS CROPS HAVE BEEN GOOD. UNFORTUATLEY THEY BLOOM FROM VERY EARLY TO EARLY.



SPRING SATIN PLUMCOT

- RIPENING FROM JULY 5-10.
- LIGHT YELLOW TO CLEAR FLESH.
- 90-100& PURPLISH RED OVERCOLOR
- SKIN HAS LIGHT PUBESCENCE
- VERY SWEET WITH VERY GOOD FLAVOR.
- SUSCEPTIBLE TO BACTERIAL SPOT.
- PRODUCES WELL WITH LIMITED POLLINATION BUT IS VERY EARLY BLOOMER





BLACK RUBY

- USDA- BY4OP
- EARLY JULY 14 -20
- MEDIUM VIGOROUS TREE
 ON PEACH
- HEAVY BLOOMING BUT LIGHT PRODUCTIVITY
- DARK REDDISH BLACK
 SKIN
- SEMI-JUICY YELLOW FLESH
- VERY GOOD FLAVOR
- GOOD POLLINATOR FOR BLACK RUBY
- POLLINATE WITH METHLEY
 AND SHIRO







Shiro 7-22-11

Centerton, NJ

SHIRO

- JULY 12-19 OR 10 DAYS AFTER EARLY GOLDEN
- YELLOW SEMI-CLINGSTONE FLESH.
- SOFT BUT JUICY WITH VERY GOOD FLAVOR
- PARTIALLY SELF-INCOMPATIBLE AND POLLINATED BY , METHLEY, VANIER AND RUBY QUEEN
- LONG LIVED TREE



METHLEY

- JULY 15-22
- RED CLINGSTONE
 FLESH
- SMALL TO MEDIUM SIZE.
- SELF FERTILE, AND VERY PRODUCTIVE
- LONG-LIVED
- WILL POLLINATE OTHER EARLY BLOOMING VARIETIES OF JAPANESE HYBRID PLUMS





BUBBLEGUM™ (TOKA)

- RIPENING ON JULY 20-26.
- SMALL TO MEDIUM FRUIT SIZE
- FLESH IS SOFT, CLINGSTONE
- YELLOW WITH A GOOD BUT GUMMY TEXTURE
- VERY GOOD FLAVOR
- SELF INCOMPATIBLE AND NEEDS A POLLINATOR OF ONE OF THE OTHER AMERICAN X JAPANESE HYBRIDS
- BLOOMS EARLY, TREES HAVE NOT SET HEAVILY BUT HAVE LIMITED POLLINATORS





FLAVOR GRENADE PLUOT®

- RIPENING AUGUST 10 -18
- FLESH IS FIRM
- LOW ACID WITH EXCELLENT FLAVOR.
- VIGOROUS, LIGHTLY PRODUCTIVE
- VERY EARLY
 BLOOMING
- SUSCEPTIBLE TO LEAF SPOTTING
- Pollinate with Dapple Dandy, Flavor King or Santa Rosa





COPAROSE PLUOT

- PLUOT RIPENING AUGUST 8-16.
- FLESH IS A FIRM GOLDEN
- SEMI FREESTONE
- FLAVOR THAT IS VERY GOOD.
- REQUIRES A POLLINATOR SUCH AS DAPPLE DANDY





FLAVOR QUEEN PLUOT

- RIPENING FROM AUGUST 17-24.
- FLESH IS FIRM,
- LOW ACID WITH EXCELLENT FLAVOR. MY FAVORITE TASTING
- LIGHT YELLOW-FLESH
- VIGOROUS, LOW PRODUCTIVITY.
- HIGH SUSCEPTIBILITY TO LEAF SPOTTING.
- POLLINATE WITH DAPPLE DANDY OR ORIENTAL PLUM.
- BLOOMS EARLIER





VANIER





- RED FRUIT
- MEDIUM SIZE
- **RIPENS** AUGUST 15 -23
- UPRIGHT SPREADING
- VIGOROUS AND
 PRODUCTIVE
- YELLOW- FLESHED
- POLLINATE WITH SHIRO, EARLY GOLDEN AND OZARK PREMIER
- GOOD TO VERY GOOD
 FLAVOR



FLAVORHEART PLUOT



RIPENING FROM AUGUST 22-SEPTEMBER 1

SEMI FREESTONE

YELLOW FLESH IS FIRM BUT SOFTENS QUICKLY.

EXCELLENT FLAVOR.

FLAVORHEART REQUIRES A POLLINATOR

LIGHT CROP ON YOUNG TREES



SPICE ZEE NECTAPLUM™

- RIPENING FROM AUGUST 15 TO 22.
- FIRM FREESTONE CREAM COLORED FLESH.
- ACIDIC WITH A SPICY
 SWEET FLAVOR
- BEAUTIFUL
 ORNAMENTAL TREE
- DARK RED LEAF IN THE SPRING THAT MATURES TO A RICH GREEN-RED IN LATE SUMMER
 SELF-FRUITFUL AND VERY PRODUCTIVE







FLAVOR KING PLUOT



- August 22- 30.
- flesh is firm
- Medium large fruit
- juicy, melting sweet and low acid with excellent flavor.
- moderately vigorous, upright,
- lightly productive
- very susceptible to leaf spotting and shot holing
- Pollinate with Dapple Dandy or Santa Rosa.
- Very early blooming

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RUBY QUEEN



- **RIPENING IN AUGUST 17-23.**
- VIGOROUS, PRODUCTIVE
- MODERATE
 SUSCEPTIBILITY TO
 BACTERIAL SPOT
- MEDIUM TO LARGE
- DARK REDDISH PURPLE SKIN
- RED-FLESHED, FIRM, HIGH IN ANTIOXIDANTS
- POLLINATE WITH ANOTHER ORIENTAL TYPE VARIETY LIKE VANIER, SHIRO, AND BLACK RUBY
- EXCELLENT FLAVOR WITH UP TO 25%SSC



DAPPLE DANDY PLUOT

AUGUST 24- SEPTEMBER 2

RED FLESH IS MEDIUM FIRM,

JUICY, ACIDIC AND SWEET WITH EXCELLENT FLAVOR

MODERATELY VIGOROUS, SPREADING

HIGH SUSCEPTIBILITY TO BACTERIAL SPOT.

EARLY BLOOMER

POLLINATED BY FLAVOR KING OR SANTA ROSA

CALLED DINASAUR PLUM





FLAVOR RICH PLUOT

- RIPENING ON AUGUST 25 – SEPTEMBER 2
- GREENISH YELLOW-FLESHED
- CLINGSTONE PLUOT
- THE FLESH HAS FAIR FLAVOR BUT STAY SO FIRM IT IS HARD TO DETERMINE MATURITY
- MOST PRODUCTIVE
- EARLY BLOOMER
- POLLINATE WITH DAPPLE DANDY, FLAVOR KING, AND SANTA ROSA





CRIMSON ROYALE PLUOT

- RIPENING AUGUST 24 TO SEPTEMBER 1
- VERY FIRM, SEMI-FREESTONE FLESH
- EXCELLENT QUALITY
 AND FLAVOR
- VIGOROUS WITH A LIGHT CROP.
- REQUIRES A POLLINATOR BUT MUST BE STUDIED FURTHER IN THE EASTERN UNITED STATES





CANDY STRIPE PLUOT

- RIPENING FROM SEPTEMBER 1-10.
- YELLOW-FLESHED, FREESTONE.
- FIRM,
- AS VERY GOOD ACIDIC FLAVOR.
- REQUIRES A POLLINATOR SUCH AS FLAVORFALL.
- LIGHT CROP



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- OF INTEREST BECAUSE
 THEY ARE COMPLEX
 INTERSPECIFIC HYBRIDS
 WITH NATIVE PLUM Prunus
 angustifolium
- TREES ARE LONG LIVED
 ON PEACH SEEDLINGS
- SOME VARIETIES HAVE BEEN VERY PRODUCTIVE'
- SOME HAVE BEEN NAMED WITH GOOD AND PROMISING FRUIT CHRACTERISTICS, GOOD SIZE, EXCLLENT FLAVOR AND LITTLE SHOTHOLING



SDA BY

Маат



Cherry Plum (Prunus avium x Prunus salicina) x Plum (Prunus salicina)



Have not tested them in New Jersey. Seen in Pa test block

Delight Cherry plum

Sprite Cherry plum

Bothe tend to be very productive in California. Early bloomers



Aprium® (Prunus armenica +) x (Prunus salicina -



Tasty Rich



Flavor Delight tested since 1989 Never had much success with Apriums[®] as they have bloomed early and mostly never set much fruit. As you can see some of the varieties crack and get bad leaf spot. They have not lived long on either Citation or Prunus persica Lovell seedlings





Prunus armeniaca x Prunus salicina x Prunus persica

• Bella Gold sold by Dave Wilson Nursery



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JSDA BY TEST VARIETIES







