

plum MARBLING

Symptoms of plum marbling only occur on fruit.

All parts of infected trees contain the viroid, but no other abnormalities have been observed.

LIST OF SYMPTOMS:

- Irregular skin colouration or marbling seen on infected plums. The plums can differ in their symptom expression ranging from light marbling to very severe where the fruit are completely unmarketable.
- Plums can be small and hard with an irregular shape and uneven surface.
- Plums may have so-called corky flesh (in both yellow-skinned and red-skinned fruit).

AFRICAN DELIGHT

SYMPTOM DESCRIPTION:

- Mild to severe marbling
- Often small fruit and, in some cases, hard fruit
- One report of corky flesh



BLACK PEARL

SYMPTOM DESCRIPTION:

- Moderate to severe marbling
- Irregular fruit surface



LADY RED

SYMPTOM DESCRIPTION:

- Severe marbling
- Often smaller fruit



AFRICAN ROSE

SYMPTOM DESCRIPTION:

- Mild to severe marbling
- Sometimes irregular surface



LAETITIA

SYMPTOM DESCRIPTION:

- Mild to moderate marbling
- Fruit often hard



RUBY CRUNCH

SYMPTOM DESCRIPTION:

- Severe marbling



RUBY STAR

SYMPTOM DESCRIPTION:

- Severe corky flesh
- Almost always associated with small and hard fruit
- Often with irregular fruit surface



FORTUNE

SYMPTOM DESCRIPTION:

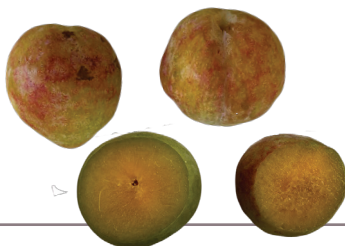
- Moderate to severe marbling
- Irregular fruit surface



SUN BREEZE

SYMPTOM DESCRIPTION:

- Very mild marbling
- Severe corky flesh
- Fruit small and hard
- Often with an irregular surface



SONGOLD

SYMPTOM DESCRIPTION:

- Very mild marbling
- Severe corky flesh
- Fruit small and hard
- Often with an irregular surface



RUBY SUN

SYMPTOM DESCRIPTION:

- Severe marbling
- Often with irregular fruit surface



PIONEER

SYMPTOM DESCRIPTION:

- Severe marbling



Plum marbling is an infectious disease of Japanese plums caused by plum viroid I (PVd-I). A viroid is a small circular RNA molecule that replicates and circulates through the host plant.

FRUIT SYMPTOMS					
<i>Cultivar</i>	<i>Marbling</i>	<i>Corky Flesh</i>	<i>Hard</i>	<i>Small</i>	<i>Irregular</i>
African Delight	*** ***	*	*	**	-
Black Pearl	***	-	-	-	***
Lady Red	***	-	-	**	-
Laetitia	***	-	**	-	-
Pioneer	***	-	-	-	-
Ruby Crunch	***	-	-	-	-
Ruby Star	-	***	***	***	**
Ruby Sun	***	-	-	-	**
Songold	***	***	***	***	**
Sun Breeze	***	***	***	***	**

* Indicates the approximate frequency of the symptom. (* <25%, ** 25-75%, *** >75%)
 Colour indicated the severity of the symptom (Mild, Moderate, Severe)

TRANSMISSION - HOW IS IT TRANSMITTED?

- Plum viroid I is not transmitted through seed. This is important as it means that it cannot be transmitted by the fruit.
- Primary spread of marbling is through the planting of infected plant material.
- Mechanical transmission of PVd-I during routine practices, such as pruning, is also highly probable.

CONTROL STRATEGIES

- Mark, remove and burn all infected trees.
- Disinfect pruning equipment.
- Purchase nursery trees from tested mother blocks (certified material under the Deciduous Fruit Plant Certification Scheme identified by a blue label).
- For any on-farm budding or grafting, secure certified and tested material from a Plant Improvement Organisation.

TESTS – CONTACT POINTS

The presence of PVd-I can be confirmed by laboratory testing at SAPO Trust or the Plant Disease Clinic at Stellenbosch University.

SAPO Trust

021 887 6823

Contact person:

Wendy Bailey - wendy@saplant.co.za

Plant Disease Clinic

Department of Plant Pathology Stellenbosch University

Contact person:

Sonja Coertze

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- Plantsiektelniek@ Stellenbosch.onmicrosoft.com

SIMILAR SYMPTOMS BUT NOT CAUSED BY PVd-I

