

root length (6.7 mm) was obtained in medial cuttings with 4000 ppm IBA.

Callusing percentage in cuttings prepared in November 1993 or in January 1994 at the University of Jordan showed no significant difference to IBA concentration. However; cuttings rooted at AL-Hussein Station in November 1993 gave significantly better callusing in basal cuttings (51.3%) while those prepared in January 1994 showed highest callusing in medial cutting treated with zero pm IBA. The overall results showed better callusing in basal cutting in comparison to medial ones.

In general, cuttings collected in January were superior to those collected in November in root number per cutting and in average root length and in less incidence of rotting.

Significantly highest germination percentage (71%) and lowest number of days for seed germination (13) were obtained in endocarpless stratified seeds. However, survival percentage of seedlings was significantly least in endocarpless stratified seeds (55.8%).

1. Introduction

Stone fruits are among the main fruit trees planted in Jordan. Total commercial production in 1993 amounted to 21700 tons, with peach formulating half of that production⁽¹⁾.

Most of the stone fruits are budded on rootstocks such as bitter almond, GF 677, Marianna and Myrobalan as well as others^(2,3). With the exception of bitter almond, these rootstocks are often unadapted to the local environment, this in turn, adds additional agricultural and economical constraints, as they require inputs such as supplemental irrigation, pest management, fertilizer application and other costly horticultural practices.

Since Jordan is considered a semiarid country that lacks sufficient water resources, it is of great importance to use drought tolerant rootstocks for stone fruit plantations.

The wild almond *Amygdalus arabica* Oliv., a member of the Rosaceae family, is a spartoid shrub, 1 to 2 m length, deciduous and native to the Eastern part (Badia) of Jordan⁽⁴⁾(Fig. 1).

Amygdalus arabica Oliv. survives and produces in a variety of environmental, biological and edaphic conditions typical to the arid and semiarid Near East, and has over the millennia, adapted to



Fig. 1. Shrubs of *Amygdalus arabica* Oliv. grown naturally in the Eastern part (Badia) of Jordan.