tionships to the other elements, (a dotted tie-line leads to a C group) so that such valences as Ce^{+4}, Pr^{+5}, U^{+3}, and Yb^{+2}, appear logically to be expected.

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Dry Mounts of Amphibian Cleavage Stages

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Use of dried vertebrate embryological materials for demonstration has recently been reported (*1, 2*). Such methods have been rather widely used but not always reported in the literature.

The use of formalin-preserved amphibian cleavage stages in embryology presents certain difficulties in handling and orientation, especially for students in large classes, and when there is lack of adequate dissecting scopes or light. The method to be described is simple and has proved helpful in the study of amphibian cleavage by classes at Duke University.

FIG. 1.

Formalin-preserved material, previously fixed in Smith's fluid or 10% formalin, is washed in tap water for 2 hr. Jelly and vitelline membranes are then removed by rolling on paper towels. Complete removal of vitelline membranes is important in order to avoid many surface reflections. Bleaching is helpful, and is the next step in the method. Standard techniques such as use of hydrogen peroxide, Javelle water, or hypochlorite solutions are satisfactory. Bleaching is followed with washing in tap water for at least 1 hr and dehydrating through a series of alcohols going from absolute alcohol to xylene, where the material may be stored (or it may be stored in 85% alcohol). The material is put on a paper towel and air-dried for 5 min. It is then ready for mounting or storage.

There are several methods for mounting, but we have found that fastening the material to the tips of paper or clear plastic triangles by means of household cement is successful. The triangles are first pierced with insect pins in a manner similar to that used in gluing small insects. Plastic triangles have the advantage of being usable again in case the specimen breaks.

Some of our dried mounts prepared in this way have been in use for 4 years and show no sign of change. They can be stored in insect boxes while not in use. With a minimum of light and low magnification, the cleavage furrows stand out clearly (Fig. 1). To facilitate handling, the pins can be placed on pieces of balsa or cork when in use. Hemisections of blastulae can be mounted in the same way as cleavage stages.

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Rooting of Haden Mango (*Mangifera indica* L.) Leaf-Bud Cuttings

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One of the factors retarding the development of a large scale mango industry in Florida is the lack of knowledge concerning the theoretical aspects of mango propagation and selection. The present paper introduces a new method of propagation which may be helpful in elucidating these problems.

At present, the varieties of mangos grown in this state are propagated by graftage, inarching, and, rarely, by air-layering (marcottage), of scions of known varieties on seedling rootstocks of unknown parentage (*1, 8, 13, 16*). The lack of uniformity in these stocks—some of which are grown from polyembryonic seeds, turpentine, apple, and No. 11 being the commonly used varieties; and others from monoembryonic seeds, such as Haden and Saigon—may be a contributory factor in the tendency toward biennial bearing and other deleterious characteristics apparent in most grafted plants regardless of variety (*1, 3, 16*).

In Florida, the chief emphasis in mango propagation has been on selection of new varieties from chance seed-

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