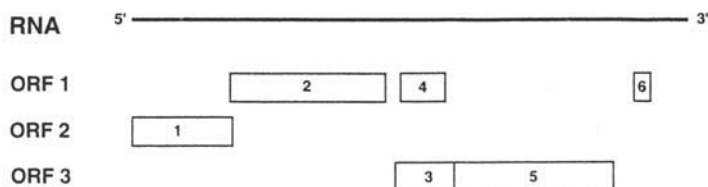


Sub-group I e.g. BYDV-PAV



Subgroup II e.g. PLRV

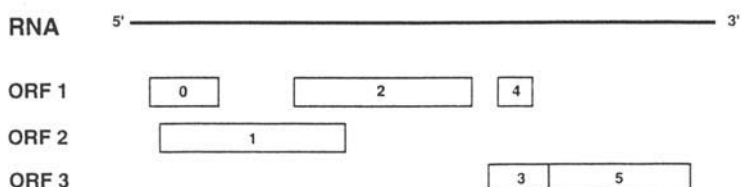


Fig. 1. The RNA genomes of Subgroup I and Subgroup II luteoviruses. The genomic, positive-sense RNAs are shown, together with the open reading frames (ORFs) for the encoded proteins. ORF 3 encodes a 17–22 kDa coat protein. ORF 3 is separated from ORF 5 by an amber termination codon, and a readthrough protein can be observed in plants. The readthrough portion encoded by ORF 5 is 50–56 kDa.

2. Waring (New Hartford, CT) 3-speed heavy-duty blender model CB6, having a 4-L stainless steel container.
3. Phosphate resuspension buffer: 0.1M potassium phosphate buffer, pH 7.0 (approx two parts 0.1M K_2HPO_4 [dibasic] and one part 0.1M KH_2PO_4 [monobasic]).
4. Sucrose 20% (w/v) in 0.1M phosphate resuspension buffer, pH 7.0.
5. A 2:1 mixture of chloroform:*n*-amyl alcohol.
6. Polyethylene glycol (PEG), average mol wt 8000; sodium chloride.
7. Sucrose pad: 30% (w/v) sucrose in 0.1M phosphate resuspension buffer, pH 7.0.
8. Leaf or root tissue (oat usually preferred) cut into 2–5 pieces and frozen.

2.2. PLRV

1. 0.1M Trisodium citrate, pH 6.0, containing 0.5% 2-mercaptoethanol (v/v) and 5% Celluclast (v/v, 1500 NCUG-1, Novo Industri, A/S Copenhagen, Denmark). The trisodium citrate solution can be made up in advance, but the other components should be added only when ready to use. **Caution:** 2-mercaptoethanol is toxic and has an unpleasant odor. Wear gloves and use in a fume cupboard. Make up only the amount required.