

### **Topic 04 –Plant Modifications**

Reading:

- 1) Hoefnagles Chap. 22 section 22.1 (e.g. Fig 22.3),
- 2) Rushforth et al. p. 130 (root modifications), 134 (stem / shoot modifications), 148-149 (leaf modifications);
- 3) The relevant chapter in your lab manual where these structures are described.

#### **I. Modifications of Shoot Organs**

##### A. Leaves

1. Bracts / Scales (including bud scales)
2. Spines
3. Succulence
4. Pitcher Traps
5. Tendrils
6. Flower Organs (sepals, petals, stamens, carpels)

##### B. Stems

1. Stolons, Runners & Rhizomes
2. Tubers
3. Succulence
4. Thorns
5. Twining Stems

##### C. Whole Shoots (i.e., stems plus leaves)

1. Bulbs
2. Corms
3. The Whole Flower
4. Tank of Tank-epiphytes

##### D. Other

1. Prickles

#### **II. Modifications of Roots**

- A. Tuberous Roots
- B. Aerial Roots
- C. Adventitious Roots
- D. Prop Roots
- E. Pneumatophores