C-4 and C-3 chemistry in a chloroplast Dark phase Sugars/starches Calvin cycle COOH C4 path C-O C3 path CH₂ - carbon COOH COOH Oxaloacetic acid PEP C-0 CH2O PO3H-[intermediate] 3-phosphoglyceric acid CO₂ + rubisco HCO-3 CO₂ + H⁺ CO2 Stomata H_2O H₂O (Transpiration) Photolysis of water Light phase Occurs in both C-3, C-4 plants