Amino Acid Pathways

1) Found in free State & as basic unit of Protein (Polymer of Aminoaco
(1) found in free state 4 as basic unit of protein (rolymer of Aminoada
(2) Precursor of some Secondary metabolite (eg. Sekaloids)
3 Precursor of Some Secondary metabolite (eg. Likaloids) 3 Most amino aid jound in nature - d Amino aid
4 Amino and pathway starts from Glycolysis R-C-NH2
2 Kreb's Cycle (Branched from it's Intermediates) H Amino auid
5 Plant synthesize all 20 amino aud (Wliphatic 4 (General formula)
heterocyclic different route of Biosynthesis
6 Nitrogen enter metabolic reaction by Reductive amination
Transamination heads on the state of damine donor for the control of the state of t
Transamination seating
Transamination reaction (1) HOOC_CH_CH_CH_CH_CH_COOH (2) Transamination reaction (3) Transamination reaction
Retoglutaric and NADPH NAD+ Glutamate
Transamination reaction Pyrovic acid Pyrovic acid Pyrovic acid Pyrovic acid
R-CH-COOH + R-C-COOH + R-CH-COOH Transaminase
R-CH-COOH + R-C-COOH + R-CH-COOH Amino aud (1) (Benez) (Accepted) R-C-COOH + R-CH-COOH Keto aud (2) (Accepted) (Product) (Product) (CH3-CH-COOH
(Product) (Product)
CH3-CH - COOH Alanine
Hlanine

Block diagram of Amino acid Pathways

