

目 录

前 言

一、水土保持原理 (1)

Elements of Soil and Water
Conservation

水土流失 (1)

Water and Soil Losses
(Soil Erosion)

古代侵蚀 (2)

Ancient Erosion

现代侵蚀 (2)

Human Erosion

正常侵蚀 (3)

Normal Erosion

加速侵蚀 (3)

Accelerated Erosion

淋溶侵蚀 (4)

Leaching Erosion

水力侵蚀 (4)

Water Erosion

击溅侵蚀 (5)

Splash Erosion

面蚀 (6)

Surface Erosion

沟蚀 (7)

Channel Erosion

溯源侵蚀 (7)

Backward Erosion

沟底下切 (8)

Vertical Erosion

沟壁扩张 (8)

Lateral Erosion

侵蚀基准面 (9)

Erosion Basis

重力侵蚀 (9)

Gravitation Erosion

潜蚀	(10)
Concealed Erosion	
崩塌	(10)
Breakdown	
滑坡	(11)
Landslide	
泻溜	(11)
Slumping	
山剥皮 (剥蚀)	(12)
Denudation	
泥石流	(12)
Debris Flow	
泥石流分类	(13)
Classification of Debris Flow	
泥石流容重	(14)
Unit Weight of Debris Flow	
高含沙洪流	(14)
Highly Concentrated Silt Discharge	

风速	(15)
Wind Speed	
风力侵蚀	(16)
Wind Erosion (Deflation)	
风蚀的过程	(16)
Processes of Wind Erosion	
风力侵蚀分级	(17)
Degree of Wind Erosion	
土地沙漠化	(18)
Desertization	
土壤水力侵蚀程度分级	(18)
Degree of Soil Erosion by Water	
土壤流失强度	(20)
Intensity of Soil Erosion	
重力侵蚀分级	(20)
Degree of Gravitation Erosion	
降雨与水土流失	(21)
Rainfall and Soil Erosion	

降雨强度与水土流失 (22)

Rainfall Intensity and Soil
Erosion

地面坡度与水土流失 (23)

Land Slope and Erosion

坡长与水土流失 (24)

Length of Slope and Soil Erosion

植被与水土流失 (25)

Vegetation Cover and Soil Erosion

土壤侵蚀的允许值 (26)

Soil Loss Tolerance

二、水文知识 (27)

Knowledge of Hydrology

水文学 (27)

Hydrology

水文要素

Hydrologi

水分循环 (28)

Water Circulation

干旱	(29)
Drought	
干旱程度	(29)
Degree of Drought	
降水量	(30)
Precipitation (Rainfall)	
汛期降雨量	(31)
Rainfall During Flood Period	
降水历时	(32)
Duration of Precipitation	
降雨强度	(32)
Intensity of Precipitation	
可能最大降水	(32)
Probable Maximum Precipitation	
流域平均雨量	(33)
Average Watershed Rainfall	
蒸发	(34)
Evaporation	

土壤入渗率	(34)
Soil Permeability	
超渗产流	(35)
Excess Rainfall Formation	
蓄满产流	(35)
Saturated Runoff Formation	
径流量	(36)
Amount of Runoff	
径流系数	(36)
Runoff Coefficient	
频率	(37)
Frequency	
水位	(38)
Water Stage	
流速	(38)
Velocity of Flow	
流量	(39)
Discharge of Flow	

最大洪峰流量	(39)
Discharge of Maximum Flood Flow	
洪水历时	(40)
Duration of Flood	
洪水过程线	(40)
Flood Hydrograph	
(Duration Line of Flood)	
洪水总量	(41)
Total Flood Volume	
悬移质	(41)
Suspended Load	
推移质	(42)
Tractional Load (Bed Load)	
含沙量	(42)
Silt Content	
输沙量	(43)
Amount of Sediment Transport	
输沙率	(44)
Sediment Transport Concentration	

输移比	(44)
Delivery Ratio	
通用土壤流失方程式	(45)
Universal Equation for Soil Erosion	
三、地貌与地形	(46)
Geomorphology and Topography	
地貌	(46)
Geomorphology	
地形	(47)
Topography	
流域下垫面	(47)
Ground Cover of Watershed	
海拔高程	(47)
Elevation (Altitude Above Sea Level)	
山岳分类	(48)
Classification of Mountains	
黄土高原的垣、梁、峁	(49)
Flatriges, Weir, Mound of Loessal Plateau	

沙丘与沙梁	(49)
Sand Dune and Sand Ridge	
河流	(50)
River	
水系	(50)
River System	
沟谷	(51)
Valley	
分水线	(52)
Watershed Divide	
坡度	(52)
Slope (Gradient)	
坡度测定	(53)
Slope Measuring	
坡长	(54)
Length of Slope	
坡向	(54)
Aspect of Slope	

比例尺	(55)
Scale	
平面图	(55)
Plan	
纵、横断面图	(56)
Longitudinal and Transverse Cross Section	
地形图	(56)
Topographical Map	
等高线	(57)
Contour	
流域长度	(57)
Watershed Length	
流域面积	(58)
Watershed Area	
流域平均宽度	(59)
Average Watershed Width	

比降	(59)
Gradient	
流域平均坡度	(60)
Average Watershed Slope	
流域平均高度	(61)
Average Watershed Height	
沟壑密度	(61)
Gully Density	
沟道弯曲系数	(62)
Watershed Twist Coefficient	
流域形状系数	(62)
Watershed Shape Factor	
流域不对称系数	(63)
Watershed Unsymmetry Factor	
流域发展系数	(63)
Watershed Development Factor	
流域不均匀系数	(64)
Watershed Non-Hemogeneity Factor	

四、土壤与植被	(65)
Soil and Plant Cover	
土壤	(65)
Soil	
成土母质	(65)
Parent Material	
黄土	(66)
Loess	
第四纪 (系)	(67)
Quaternary Period (System)	
垂直节理	(67)
Vertical Joint	
马兰黄土	(68)
Malan Loess	
离石黄土	(68)
Lishi Loess	
午城黄土	(69)
Wucheng Loess	

红土	(69)
Red Earth	
淤泥	(70)
Mud (Silt)	
荒漠	(70)
Desert	
次生盐碱土	(71)
Secondary Saline Alkali Soil	
土壤水分	(72)
Soil Moisture	
土壤含水量	(73)
Soil Water Content	
最优土壤含水量	(74)
Optimum Soil Moisture	
界限含水量	(75)
Limiting Moisture Capacity	
凋萎系数	(75)
Wilting Coefficient	

墒情	(76)
Soil Moisture	
土壤空气	(79)
Air in The Soil	
土壤孔隙	(79)
Soil Pore	
土壤孔隙度	(80)
Soil Porosity	
土壤孔隙比	(81)
Soil Porosity Ratio	
土的饱和度	(81)
Soil Saturation	
土壤通气性	(82)
Soil Aeration	
土壤剖面	(83)
Profile of Soil	
土的渗透性	(83)
Soil Permeability	

渗透系数	(84)
Permeability Coefficient	
黄土的蓄水性	(84)
Moisture Holding Capacity of Loess	
土壤湿容重	(85)
Unit Humid Weight of Soil	
土壤干容重	(85)
Unit Dry Weight of Soil	
土壤比重	(86)
Specific Gravity of Soil	
土壤的抗蚀能力	(87)
Resistance of Soil to Soil Erosion	
土壤的抗冲能力	(87)
Anti-Eroding Ability of Soil	
土壤肥力	(88)
Soil Fertility	
土壤有机质	(88)
Organic Matter of Soil	

土壤养分含量分级	(89)
Degree of Soil Fertility	
土壤结构	(90)
Structure of Soil	
团粒结构	(91)
Crumb Structure	
土壤质地	(92)
Soil Texture	
土壤酸碱度	(92)
Soil Acidity and Alkalinity	
土壤的化学成分	(93)
Chemical Content of Soil	
生土熟化	(94)
Maturation of Soil	
高产土壤	(94)
Highly Production Soil	
植被	(95)
Plant Cover	