IMPHAL, June 15, 2015, monday TZkxg 19 eg wkEq, egiFyskq, akmg\k sbAKgi 3413 obT\lE mkEwkB 2 SOjgmOM HUEIYEN LANPAO

ꯄ꯭ꯔꯣꯕꯥꯏꯑꯣꯇꯤꯛꯁꯅ ꯁꯥ-ꯁꯟꯗ ꯄꯤꯔꯤꯕ ꯀꯥꯟꯅꯕꯁꯤꯡ
ꯂꯧꯍꯣꯟ ꯍꯨꯟꯕ
ꯍꯧꯖꯤꯛꯀꯤ ꯃꯇꯝꯗ ꯂꯣꯏꯅꯔꯤꯕ ꯁꯥ-ꯁꯟ ꯈꯨꯗꯤꯡꯃꯛ
ꯃꯁꯥꯒꯤ ꯍꯥꯟꯅꯗꯒꯤ ꯊꯣꯛꯄ ꯄꯣꯠꯊꯣꯛꯇꯒꯤ ꯍꯦꯟꯅ
ꯊꯣꯛꯅꯕꯒꯤ ꯄꯥꯟꯗꯝ ꯊꯝꯂꯒ ꯄꯤꯖꯕ ꯌꯥꯕ ꯃꯌꯥꯝ ꯑꯃ
ꯄꯤꯖꯗꯨꯅ ꯑꯅꯥ ꯑꯌꯦꯛ ꯌꯥꯎꯗꯅ ꯂꯣꯏꯅꯔꯤ꯫ ꯁꯥ-ꯁꯟ
ꯈꯨꯗꯤꯡꯃꯛ ꯃꯈꯣꯏꯒꯤ ꯀꯌꯥꯠꯁꯤꯡꯅ ꯃꯥꯒꯤ-ꯃꯥꯒꯤ ꯃꯊꯧ ꯀꯌꯥ
ꯄꯥꯡꯊꯣꯛꯂꯤ ꯃꯁꯠꯗ ꯊꯤꯔꯤꯟꯁꯤꯅ ꯈ꯭ꯋꯥꯏꯗꯒꯤ ꯍꯦꯟꯅ ꯃꯊꯧ
ꯇꯧꯏ ꯃꯔꯝ ꯑꯁꯤꯅ ꯊꯤꯔꯤꯟꯁꯤꯅ ꯈ꯭ꯋꯥꯏꯗꯒꯤ ꯑꯋꯥꯕ ꯐꯤꯚꯝꯗ
ꯂꯩꯕ ꯃꯔꯝꯅ ꯂꯥꯏꯅꯥ ꯀꯌꯥ ꯊꯣꯛꯍꯟꯕ ꯉꯝꯕ ꯍꯤꯡꯀꯨꯞꯁꯤꯡꯒꯤ
ꯆꯪꯐꯝ ꯑꯣꯏꯔꯤ ꯃꯔꯝ ꯑꯁꯤꯅ ꯊꯤꯔꯤꯟꯕꯨ ꯍꯦꯟꯅ ꯃꯄꯥꯡꯒꯜ
ꯀꯟꯈꯠꯍꯟꯅꯕꯗ ꯀꯥꯟꯅꯕ ꯄꯤꯕ ꯍꯤꯡꯀꯨꯞ ꯑꯃ ꯌꯥꯎꯕ
ꯍꯥꯏꯕꯗꯤ Probiotic ꯑꯁꯤ ꯁꯤꯖꯤꯟꯅꯕ ꯗꯔꯀꯥꯔ ꯂꯩ ꯑꯗꯨꯕꯨ
ꯁꯟꯕꯨ ꯑꯌꯥꯝꯕꯅ ꯑꯦꯟꯇꯤꯕꯥꯏꯑꯣꯇꯤꯛꯁ ꯁꯤꯖꯤꯟꯅꯈꯤꯕꯅ
Probiotic ꯑꯁꯤ ꯈꯨꯁꯦꯝꯒꯤ ꯄꯣꯠꯊꯣꯛ ꯃꯈꯜ ꯑꯃꯅꯤ
ꯃꯈꯣꯏꯗ ꯀꯥꯟꯅꯔꯕ bacterial strain ꯀꯌꯥ ꯌꯥꯎꯏ
ꯃꯈꯣꯏ ꯑꯁꯤ ꯃꯆꯤꯟꯖꯥꯛꯇ ꯅꯠꯇ꯭ꯔꯒ ꯇꯣꯉꯥꯟꯅ ꯄꯤꯖꯕ \
ꯥꯏ꯫ ꯌꯥꯝꯅ ꯇꯣꯏꯅ ꯁꯤꯖꯤꯟꯅꯔꯤꯕ Probiotic ꯈꯔꯥ ꯃꯤꯡ
[OTe wMmqr Lactic Acid bacteria, Lacto
bacillus, Streptococcus, Exteracoccus,
Bacillus, Clotridium, Bifidobacterium
ꯀꯩ ꯑꯃꯗꯤ ꯟ.ꯖꯍꯦꯡ ꯃꯁꯤꯒꯤ ꯃꯊꯛꯇ ꯑꯇꯩ Yeast,
Enzymes, biomass a\kA [KgKb Probiotic
ꯀꯤ ꯃꯅꯨꯡ ꯆꯜꯂꯤ꯫ Bacterial Probiotic ꯁꯤꯡ
ꯑꯁꯤꯅ ꯌꯦꯟ, ꯑꯣꯛ ꯑꯃꯗꯤ ꯁꯅꯥꯎꯗ ꯌꯥꯝꯅ ꯀꯥꯟꯅꯩ, Yeast
[arg fungal probiotics (Saccharayces
cercuisize [aKbi Aspergillus oryzae)
ꯁꯤꯅ ꯁꯟꯕꯤꯗ ꯌꯥꯝꯅ ꯀꯥꯟꯅꯍꯜꯂꯤ꯫ ꯄꯨꯜꯂꯞ ꯄꯟꯁꯤꯟꯗ
ꯈꯨꯗꯤꯡꯃꯛꯇꯒꯤ ꯀꯥꯟꯅꯕ ꯍꯦꯟꯅ ꯄꯤꯔꯤ꯫
Protiotic ꯄꯤꯖꯕꯒꯤ ꯀꯥꯟꯅꯕꯁꯤ ꯃꯈꯥꯒꯤ ꯑꯁꯨꯝꯅ
ꯅꯩꯅꯕ ꯌꯥꯏ꯫
ꯀ) ꯃꯆꯤꯟꯖꯥꯛ ꯄꯤꯖꯕꯒꯤ ꯃꯑꯣꯡ
ꯁ) ꯁꯥ-ꯁꯟꯒꯤ ꯃꯈꯜ ꯑꯃꯗꯤ ꯃꯈꯣꯏꯒꯤ ꯃꯄꯨꯡ ꯐꯥꯕꯒꯤ ꯃꯇꯝ
ꯂ) ꯃꯈꯣꯏꯅ ꯄꯨꯊꯣꯔꯛꯄ ꯄꯣꯠꯊꯣꯛꯁꯤꯡ
ꯃ) ꯃꯈꯣꯏꯅ ꯋꯥꯕꯒꯤ ꯆꯥꯡ
ꯄ) ꯃꯈꯣꯏꯅ ꯂꯩꯔꯤꯕ ꯑꯀꯣꯏꯕꯒꯤ ꯐꯤꯚꯝ ꯑꯁꯤꯅꯆꯤꯡꯕ
ꯍꯧꯖꯤꯛꯁꯤ ꯖꯨꯟ ꯊꯥꯅꯤ꯫ ꯇꯪꯈꯥꯏ ꯆꯪꯁꯤꯜꯂꯛꯀꯗꯧꯔꯦ꯫ ꯃꯩꯇꯩ
ꯊꯥꯕꯥꯟꯗ ꯏꯉꯥꯒꯤ ꯄꯨꯔꯅꯤꯃꯥ ꯌꯧꯔꯦ꯫ ꯏꯉꯥ-ꯏꯉꯦꯟ ꯅꯣꯡ ꯆꯨꯕ
ꯃꯇꯝꯅꯤ ꯑꯗꯨꯕꯨ ꯅꯣꯡꯒꯤ ꯃꯃꯤꯗꯤ ꯎꯗ꯭ꯔꯤ꯫ ꯏꯊꯥꯏ ꯂꯧꯈꯣꯡꯒꯤ
ꯈꯨꯗꯣꯡꯆꯥꯕ ꯐꯪꯕ ꯃꯐꯝ ꯈꯔ ꯅꯠꯇꯅ ꯑꯌꯥꯝꯕ ꯂꯧꯕꯨꯛꯁꯤꯡꯗ ꯂꯧꯍꯣꯟ
ꯍꯨꯟꯐꯝ ꯁꯦꯝꯅꯕ ꯏꯁꯤꯡ ꯂꯩꯇꯦ ꯑꯃꯔꯣꯝꯗꯅ ꯑꯃꯨꯛ ꯖꯨꯂꯥꯏ
ꯊꯥꯒꯤ ꯇꯥꯔꯤꯛ 15 ꯐꯥꯎꯕꯒꯤ ꯃꯅꯨꯡꯗ ꯂꯧ ꯂꯤꯡꯕꯅ ꯈ꯭ꯋꯥꯏꯗꯒꯤ ꯐꯩ,
ꯃꯁꯤꯗꯒꯤ ꯊꯦꯡꯊꯔꯕꯗꯤ ꯐꯧꯊꯣꯛ ꯍꯟꯊꯩ ꯍꯥꯏꯕ ꯋꯥꯐꯝ ꯑꯃꯁꯨ ꯃꯌ
ꯥꯝꯅ ꯍꯦꯟꯅ ꯈꯪꯅꯔꯕꯅꯤ꯫ ꯑꯩꯈꯣꯏ ꯍꯧꯖꯤꯛ ꯀꯔꯤ ꯇꯧꯒꯅꯤ? ꯅꯣꯡ
ꯉꯥꯏꯗꯨꯅ ꯂꯩꯈꯤꯒꯗ꯭ꯔꯥ ꯅꯠꯇ꯭ꯔꯒ ꯎꯄꯥꯏ ꯑꯃ ꯂꯧꯗꯨꯅ ꯂꯧꯍꯣꯟ ꯍꯨꯟꯅꯕ
ꯍꯣꯠꯅꯒꯗ꯭ꯔꯥ? ꯂꯧꯍꯣꯟ ꯍꯨꯟꯐꯝ ꯁꯦꯝ ꯁꯥꯕꯗ ꯃꯇꯝ ꯈꯔꯥ ꯑꯃꯨꯛ
ꯆꯪꯈꯤꯒꯅꯤ꯫ ꯖꯨꯟꯒꯤ ꯇꯥꯔꯤꯛ ꯀꯌꯥꯗ ꯂꯧꯍꯣꯟ ꯍꯜꯂꯕꯗꯤ ꯖꯨꯂꯥꯏꯒꯤ
ꯇꯥꯔꯤꯛ 15 ꯗꯒꯤ ꯆꯣꯟꯊꯗꯅ ꯂꯧ ꯂꯤꯡꯕ ꯌꯥꯅꯕ ꯍꯣꯠꯅꯒꯅꯤ꯫ _
ꯥꯈꯜ ꯃꯨꯟꯅ ꯈꯟꯕ ꯃꯇꯝꯅꯤ꯫
ꯃꯇꯥꯡ ꯑꯁꯤꯗ ꯀꯥꯟꯅꯕ ꯌꯥꯕ ꯋꯥꯐꯝ ꯈꯔꯥ ꯂꯩ꯫ ꯏꯊꯩ-ꯂꯧꯈꯣꯡꯒꯤ
ꯏꯁꯤꯡ ꯐꯪꯕ ꯃꯐꯝꯒꯤꯗꯤ ꯊꯣꯏꯗꯣꯛꯅ ꯋꯥꯅꯤꯡꯉꯥꯏ ꯑꯣꯏꯗ꯭ꯔꯦ꯫
ꯂꯧꯍꯣꯟ ꯍꯨꯟꯐꯝꯁꯨ, ꯂꯤꯡꯊꯣꯛꯅꯕ ꯃꯐꯝꯁꯨ ꯃꯇꯥꯡ ꯆꯥꯅ-ꯆꯥꯅ
ꯁꯦꯝꯕ ꯉꯝꯂꯅꯤ꯫ ꯏꯁꯤꯡ ꯐꯪꯗꯕ ꯃꯐꯝꯒꯤꯁꯨ ꯂꯧꯍꯣꯟ ꯍꯨꯟꯅꯕ
ꯎꯄꯥꯏ ꯊꯤꯕ ꯇꯥꯕꯅꯤ꯫ ꯍꯧꯖꯤꯛꯃꯛ ꯂꯧꯍꯣꯟ ꯍꯨꯟꯅꯕ ꯃꯐꯝ ꯁꯦꯝ
ꯁꯥꯕꯤꯕ ꯌꯥꯔꯦ꯫ ꯅꯣꯡꯗꯤ ꯁꯣꯏꯗꯅ ꯇꯥꯔꯅꯤ, ꯊꯥ ꯃꯈꯥꯏ, ꯊꯥ ꯑꯃꯒꯤ
ꯃꯇꯝ ꯉꯥꯏꯕ ꯌꯥꯔꯤ ꯂꯥꯛꯈꯤꯅꯤ ꯍꯥꯏꯕꯒꯤ ꯑꯥꯁꯥ ꯊꯝꯁꯤ꯫ ꯃꯇꯝꯗꯨꯗ
ꯏꯁꯥꯒꯤ ꯂꯧꯍꯟꯅ ꯏꯅꯥꯛꯇ ꯂꯩꯔꯕꯗꯤ ꯁꯣꯏꯗꯅ ꯂꯧ ꯂꯤꯡꯕ ꯐꯪꯒꯅꯤ꯫
ꯂꯩꯍꯧꯗ꯭ꯔꯒꯅ ꯂꯤꯡꯕ ꯐꯪꯂꯣꯏ꯫ ꯂꯩꯍꯧꯕꯅ ꯐꯩ ꯈꯜꯂꯤ꯫ ꯃꯇꯥꯡꯁꯤꯗ
ꯈꯟꯅꯕ ꯌꯥꯕꯁꯤ ꯂꯧꯍꯣꯟꯅ ꯅꯨꯃꯤꯠ ꯀꯌꯥꯅꯤ ꯁꯨꯕꯗ ꯂꯤꯡꯕꯅ SD_
ꯥꯏꯗꯒꯤ ꯐꯩ ꯍꯥꯏꯕꯁꯤꯅꯤ꯫ ꯍꯧꯖꯤꯛꯃꯛ ꯍꯨꯟꯕꯁꯤꯅ ꯊꯥ ꯃꯈꯥꯏ ꯑꯃꯗ
ꯅꯣꯡ ꯂꯥꯛꯂꯕꯗꯤ ꯑꯗꯨꯃꯛ ꯅꯨꯃꯤꯠ ꯈꯔꯅꯤ ꯃꯇꯨꯡꯗ ꯂꯧꯐꯝ ꯁꯦꯝ
ꯁꯥꯔꯒ ꯅꯨꯃꯤꯠ 20-25 ꯅꯤ ꯁꯨꯔꯕ ꯂꯧꯍꯣꯟꯅ ꯂꯤꯡꯕꯒꯤ ꯇꯥꯟꯖꯥ
ꯐꯪꯒꯅꯤ, ꯈ꯭ꯋꯥꯏꯗꯒꯤ ꯐꯕꯥ ꯇꯥꯟꯖꯥꯁꯨ ꯑꯣꯏꯒꯅꯤ꯫ ꯈꯔꯥ ꯊꯦꯡꯊꯅ
ꯅꯣꯡ ꯂꯥꯛꯂꯒꯅ ꯊꯥ ꯐꯥꯔꯕ ꯅꯠꯇ꯭ꯔꯒ ꯈꯔꯥ ꯍꯦꯜꯂꯒ ꯂꯧꯍꯣꯟꯅ
ꯂꯤꯡꯕ ꯇꯥꯕꯅꯤ꯫ ꯅꯣꯡ ꯁꯨꯛꯂꯥꯛ ꯂꯥꯛꯇ꯭ꯔꯒꯗꯤ ꯎꯄꯥꯏ ꯂꯩꯇꯦ꯫
ꯃꯇꯥꯡ ꯑꯁꯤꯗ ꯈꯪꯖꯤꯟꯕ ꯌꯥꯕꯁꯤ ꯑꯔꯤꯕ ꯂꯧꯍꯣꯟꯅ ꯂꯤꯡꯂꯕꯗꯤ
ꯈꯔꯥ ꯀꯨꯡꯅ ꯂꯤꯡꯕ ꯑꯃꯗꯤ ꯆꯨꯛ ꯑꯃꯗ ꯄꯥꯝꯕꯤ ꯈꯔꯥ ꯍꯦꯟꯅ ꯊꯥꯕ
ꯍꯥꯏꯕꯁꯤꯅꯤ꯫

ꯍꯧꯖꯤꯛ ꯑꯃꯨꯛ ꯂꯧꯍꯣꯟ ꯍꯨꯟꯕꯒꯤ ꯃꯑꯣꯡ ꯈꯔꯥ ꯅꯩꯅꯗꯨꯅ \
ꯦꯡꯁꯤ꯫ ꯂꯧꯍꯣꯟ ꯍꯨꯟꯕꯒꯤ ꯃꯑꯣꯡ/ꯃꯈꯜ ꯈꯔꯥ ꯂꯩ -1) ꯄꯥꯝꯐꯦꯜ
ꯂꯧꯍꯣꯟ 2)ꯀꯥꯡ ꯂꯧꯍꯣꯟ, 3) ꯗꯥꯄꯣꯒ ꯂꯧꯍꯣꯟ
ꯄꯥꯝꯐꯦꯜ ꯂꯧꯍꯣꯟ:
ꯃꯃꯤꯡꯅ ꯇꯥꯛꯄꯒꯨꯝ ꯄꯥꯝꯐꯦꯜ ꯅꯩꯔꯒ ꯃꯇꯣꯟ ꯊꯣꯛꯂꯕ
ꯃꯁꯤꯒꯤ ꯈꯦꯟꯅꯕ ꯃꯌꯥꯝꯁꯤꯅ Probiotic ꯀꯤ
ꯀꯥꯟꯅꯕꯁꯤꯁꯨ ꯈꯦꯟꯅꯍꯜꯂꯤ꯫ ꯃꯁꯥ ꯌꯥꯝꯅ ꯆꯣꯛꯊꯅ ꯂꯩꯕ/ ꯋꯥꯕ
ꯁꯥ-ꯁꯟꯁꯤꯡꯗꯗꯤ Pribiotic ꯀꯤ ꯀꯥꯟꯅꯕꯁꯤꯡ ꯐꯖꯅ ꯈꯪꯕ
ꯉꯝꯃꯤ꯫

Probiotic ꯇ ꯌꯥꯎꯔꯤꯕ ꯑꯅꯧꯕ ꯍꯤꯡꯀꯨꯞꯁꯤꯡ
ꯑꯁꯤ ꯍꯥꯟꯅꯗꯒꯤ Intestenil tract ꯇ ꯂꯩꯕ ꯑꯣꯏꯒꯅꯤ
ꯑꯃꯗꯤ ꯃꯁꯤ ꯆꯥꯁꯤꯟꯈ꯭ꯔꯒ ꯌꯥꯝꯅ ꯊꯨꯅ ꯁꯟꯗꯣꯔꯛꯄ ꯉꯝꯕ,
ꯆꯥꯎꯍꯟꯕ ꯉꯝꯕ ꯑꯃꯗꯤ ꯝꯖꯡꯛ ꯊꯨꯅ ꯄꯨꯊꯣꯛꯄ ꯉꯝꯕ
ꯑꯣꯏꯒꯅꯤ, ꯑꯃꯗꯤ ꯆꯥꯁꯤꯟꯈ꯭ꯔꯕ ꯃꯇꯨꯡꯗ ꯆꯈꯥꯎꯗꯒꯤ
ꯊꯣꯔꯛꯄ ꯝꯖꯡꯛ ꯑꯃꯗꯤ ꯎꯡꯦꯅ ꯗꯒꯤ resistant ꯑꯣꯏꯕ
ꯉꯝꯒꯗꯕꯅꯤ꯫
Probiotic ꯁꯤꯖꯤꯟꯅꯕꯒꯤ ꯀꯥꯟꯅꯕ:

ꯀ) ꯃꯁꯥ ꯐꯅꯥ ꯂꯩꯕ ꯉꯝꯃꯤ ꯔꯤꯄꯣꯔ꯭ꯠꯀꯤ ꯃꯇꯨꯡ ꯏꯟꯅ
ꯁꯟꯗ Probiotic ꯄꯤꯖꯕꯒ ꯄꯤꯖꯗꯕꯒ ꯌꯦꯡꯅꯕꯗ ꯄꯤꯖꯕꯅ
ꯃꯁꯥꯒꯤ ꯅꯣꯡꯃꯒꯤ ꯂꯨꯝꯕꯒꯤ ꯆꯥꯡꯁꯤ ꯆꯥꯗꯥ 13.2 ꯍꯦꯜꯂꯤ
ꯑꯃꯗꯤ ꯁꯤꯕꯒꯤ ꯆꯥꯡꯁꯨ ꯆꯥꯗꯥ 27.7 ꯍꯟꯊꯍꯜꯂꯤ꯫ ꯁꯥ-ꯁꯟꯗ
ꯃꯆꯤꯟꯖꯥꯛꯇ Pribiotic ꯍꯥꯞꯇꯨꯅ ꯄꯤꯖꯕꯅ ꯆꯥꯕꯒꯤ ꯆꯥꯡ
\kAe _kiT, feed conversion efficiency _
ꯥꯡꯏ ꯑꯃꯗꯤ ꯂꯨꯝꯕꯒꯤ ꯆꯥꯡꯁꯨ ꯍꯦꯟꯒꯠꯍꯜꯂꯤ Probiotic
wgcqe KEr Ruminal pH [arg Latale vki
ꯑꯃꯗ ꯊꯝꯕ ꯉꯝꯍꯜꯂꯤ ꯑꯐꯕ ꯃꯆꯤ ꯑꯣꯏꯕ Nutrients

ꯀꯌꯥ ꯆꯨꯞꯁꯤꯟꯕ ꯉꯝꯃꯤ꯫
ꯁ) ꯂꯥꯏꯅꯥ ꯆꯦꯟꯗꯕ ꯃꯁꯥ ꯐꯕꯥ ꯁꯥ-ꯁꯟꯗꯤ ꯜꯡꯖꯗꯍ
organisms a\kA [a Intestinal tract fk \kBqe
ꯃꯈꯣꯏꯅ ꯆꯥꯁꯤꯟꯔꯤꯕ ꯃꯆꯤꯟꯖꯥꯛ ꯈꯨꯗꯤꯡꯃꯛ ꯇꯨꯝꯍꯟꯗꯨꯅ
ꯑꯐꯕ Nutrient ꯀꯌꯥ ꯆꯨꯞꯁꯤꯟꯍꯧꯕꯒꯤ ꯃꯄꯥꯡꯒꯜ ꯄꯤꯔꯤ
ꯀꯔꯤꯒꯨꯝꯕ ꯃꯄꯥꯡꯒꯜ ꯁꯣꯟꯊꯔꯛꯄ/ꯌꯥꯝꯅ ꯋꯥꯕ ꯃꯇꯝꯗꯗꯤ
Lactobacillus ꯀꯤ ꯃꯁꯤꯡꯁꯤ ꯍꯟꯊꯔꯛꯇꯨꯅ ꯊꯤꯔꯤꯟ
ꯃꯅꯨꯡꯗ ꯑꯇꯣꯞꯄ ꯂꯥꯏꯅꯥ ꯆꯦꯟꯕ ꯜꯡꯖꯗꯍ organisms
ꯀꯌꯥꯒꯤ ꯃꯁꯤꯡ ꯍꯦꯟꯒꯠꯍꯜꯂꯤ ꯑꯃꯗꯤ ꯃꯈꯣꯏꯒꯤ
ꯊꯤꯔꯤꯟꯒꯤ ꯂꯥꯏꯅꯥ ꯈꯨꯗꯝ ꯑꯣꯏꯅ ꯍꯥꯏꯔꯕꯗ Diarshoea
[arg Production Performance oEFoMmg
ꯃꯁꯤꯗ ꯑꯩꯈꯣꯏꯅ Probiotic ꯁꯤꯖꯤꯟꯅꯔꯒꯗꯤ ꯍꯥꯟꯅꯒꯤ

WgzA okTqrg Beneficial [arg Pathogenic
micro organisms sjg skTre Intestinal
flora mpoEq ZAag! Lacto bacellus strain

ꯐꯧꯗꯤꯅ ꯍꯨꯟꯕ ꯂꯧꯍꯣꯟꯕꯨ ꯄꯥꯝꯐꯦꯜ ꯂꯧꯍꯣꯟ ꯍꯥꯏꯔꯒ ꯈꯪꯅꯩ꯫
ꯅꯤꯡꯊꯤꯅ ꯈꯣꯏꯔꯒ ꯎꯀꯥꯏ ꯇꯛꯇꯨꯅ ꯂꯧꯍꯟꯐꯝ ꯁꯦꯝꯕꯤꯒꯅꯤ꯫
ꯂꯧꯍꯣꯟꯐꯝꯒꯤ ꯄꯥꯛ ꯆꯥꯎꯕ: ꯂꯤꯡꯒꯗꯧꯔꯤꯕ ꯂꯧꯐꯝꯒꯤ ꯁꯔꯨꯛ 10
ꯊꯣꯛꯄꯒꯤ ꯑꯃ ꯄꯥꯛ ꯆꯥꯎꯕ ꯃꯐꯝꯗ ꯍꯨꯟꯕꯅ ꯂꯟꯇꯛ ꯇꯧꯕ,
ꯄꯖꯦꯡ ꯄꯥꯛꯄ, ꯃꯁꯥ ꯐꯥꯕ ꯂꯧꯍꯣꯟ ꯐꯪꯒꯅꯤ꯫ ꯃꯁꯥ ꯐꯥꯕ ꯂꯧꯍꯣꯟꯅ
ꯂꯤꯡꯕꯅ ꯐꯧ ꯐꯥꯕ ꯍꯦꯟꯒꯅꯤ꯫ ꯂꯧꯍꯣꯟ ꯌꯥꯝꯅ ꯆꯪꯂꯣꯏ, ꯐꯧꯗꯤ \
ꯥꯝꯅ ꯆꯪꯂꯣꯏ꯫ ꯂꯧ ꯁꯪꯒꯝ ꯑꯃ ꯂꯤꯡꯅꯅꯕ ꯃꯐꯝꯁꯤ ꯆꯥꯎꯔꯥꯛꯅ
ꯐꯨꯠ 20 ꯄꯥꯛꯄ ꯐꯨꯠ 130 ꯁꯥꯡꯕ ꯑꯣꯏꯐꯝ ꯊꯣꯛꯏ꯫ ꯊꯣꯏꯗꯣꯛꯅ
ꯑꯀꯛꯅꯕꯗꯤ ꯂꯩꯇꯦ꯫ ꯏꯁꯥꯒꯤ ꯂꯝꯒꯤ ꯃꯑꯣꯡꯒꯤ ꯃꯇꯨꯡ ꯏꯟꯅ
ꯏꯁꯀ꯭ꯌꯔ ꯐꯤꯠ 2700 ꯃꯨꯛ ꯇꯥꯟꯕ ꯁꯦꯝꯂꯒ ꯂꯣꯏꯔꯦ꯫
ꯍꯥꯔꯒꯤ ꯆꯥꯡ : ꯃꯊꯛꯀꯤ ꯁꯪꯒꯝ ꯑꯃ ꯂꯤꯡꯅꯕ ꯊꯝꯖꯈꯤꯕ
ꯂꯧꯐꯝꯗ ꯌꯨꯔꯤꯌꯥ ꯀꯤꯂꯣ 3.4 ꯁꯨꯄꯔ ꯀꯤꯂꯣ 6.5 ꯑꯃꯁꯨꯡ ꯄꯣꯇꯥꯁ
ꯀꯤꯂꯣ 2 ꯑꯔꯣꯏꯕ ꯈꯣꯏꯕ ꯑꯃꯗꯤ ꯅꯩꯕꯗ ꯆꯥꯏꯍꯧꯁꯤ꯫
ꯍꯨꯟꯕꯒꯤ ꯃꯑꯣꯡ: ꯅꯤꯡꯊꯤꯅ ꯎꯀꯥꯏ ꯇꯛꯇꯨꯅ ꯁꯦꯝꯂꯕ
ꯃꯐꯝꯗ ꯂꯧꯍꯣꯟ ꯆꯥꯕꯥꯛ ꯑꯣꯏꯅ ꯍꯨꯟꯕꯒꯤ ꯃꯍꯨꯠꯇ ꯐꯩꯗꯣꯝ ꯅꯥꯏꯅ
ꯍꯨꯟꯁꯤ꯫ ꯐꯩꯗꯣꯝꯒꯤ ꯑꯄꯥꯛꯄꯁꯤ ꯐꯨꯠ ꯑꯍꯨꯝꯃꯈꯥꯏ ꯑꯣꯏꯍꯟꯁꯤ꯫
ꯑꯁꯥꯡꯕꯗꯤ ꯏꯁꯥꯒꯤ ꯂꯧꯐꯝꯒꯤ ꯐꯩꯗꯣꯝꯁꯤꯡꯗ ꯐꯪꯕ ꯑꯁꯥꯡꯕꯒꯤ ꯃꯈꯥ
ꯄꯣꯜꯍꯟꯕ ꯌꯥꯏ꯫ ꯐꯩꯗꯣꯝꯁꯤꯡ ꯇꯥꯛꯇꯨꯅ ꯆꯨꯔꯤ ꯅꯥꯏꯅ ꯁꯦꯝꯕꯒꯤ
ꯃꯊꯧꯗꯤ ꯇꯥꯗꯦ꯫ ꯐꯩꯗꯣꯝꯁꯤꯡꯒꯤ ꯃꯔꯛꯇ ꯐꯨꯠ ꯑꯃ ꯄꯥꯛꯄ
ꯂꯝꯕꯤ ꯑꯃ ꯈꯥꯛꯂꯒ ꯂꯣꯏꯔꯦ꯫ ꯑꯄꯨꯟꯕ ꯐꯩꯗꯣꯝꯒꯤ ꯂꯧꯔꯤꯌꯥ
ꯑꯀꯣꯏꯕꯗ ꯉꯥꯃꯔꯨꯝ ꯁꯥꯅ ꯈꯔꯥ ꯀꯨꯠꯄ ꯄꯔꯦꯡ ꯑꯃ ꯁꯦꯝꯗꯨꯅ
ꯏꯁꯤꯡ ꯆꯤꯊꯣꯛ-ꯆꯤꯁꯤꯟ ꯌꯥꯅꯅꯕꯗꯤ ꯊꯝꯒꯅꯤ꯫ ꯑꯁꯨꯝꯅ
ꯁꯦꯝꯂꯕ ꯐꯩꯗꯣꯝꯁꯤꯡꯗ ꯃꯇꯣꯟ ꯊꯣꯛꯂꯕ ꯐꯧꯗꯤꯅ ꯍꯨꯟꯕꯤꯕ \
ꯥꯔꯦ꯫ ꯍꯨꯜꯂꯝꯗꯥꯏꯗ ꯏꯁꯤꯡ ꯄꯥꯏꯔꯞꯅ ꯊꯝꯒꯅꯤ꯫ ꯍꯨꯜꯂꯕ ꯃꯇꯨꯡ
ꯂꯧꯍꯣꯟꯅ ꯋꯥꯡꯈꯠꯂꯛꯄꯒ ꯏꯔꯣꯏꯅꯅ ꯂꯧꯍꯣꯟ ꯊꯨꯝꯍꯟꯗꯅ
ꯏꯁꯤꯡꯒꯤ ꯆꯥꯡ ꯍꯦꯟꯒꯠꯍꯟꯒꯅꯤ꯫ ꯌꯥꯔꯤꯕꯃꯈꯩ ꯏꯁꯤꯡ ꯀꯪꯗꯅꯕ
ꯍꯣꯠꯅꯒꯅꯤ꯫ ꯀꯪꯈꯤꯕ ꯊꯣꯛꯂꯕꯗꯤ ꯂꯧꯍꯣꯟ ꯐꯣꯏꯗꯕ ꯋꯥꯏ ꯃꯥꯔꯥ \
ꯥꯝꯅ ꯇꯠꯀꯜꯂꯤ꯫ ꯂꯧꯍꯣꯟ ꯐꯣꯏꯔꯝꯗꯥꯏꯗ ꯍꯥꯔꯅꯆꯤꯡꯕ ꯆꯥꯏꯗꯨꯅ
ꯅꯧꯊꯣꯛꯍꯟꯕꯁꯨ ꯐꯠꯇꯦ꯫
ꯀꯥꯡ ꯂꯧꯍꯣꯟ:
ꯑꯀꯪꯕ ꯐꯩꯗꯣꯝꯗ ꯑꯀꯪꯕ (ꯏꯁꯤꯡꯗ ꯇꯤꯟꯗꯕ, ꯃꯇꯣꯟ
ꯊꯣꯛꯇꯕ) ꯐꯧꯗꯤꯅ ꯂꯧꯍꯣꯟ ꯍꯨꯟꯕꯕꯨ ꯀꯥꯡ ꯂꯧꯍꯣꯟ ꯍꯥꯏꯔꯒ ꯈꯪꯅꯩ꯫
ꯁꯟꯊꯤ ꯊꯟꯌꯨꯡꯒꯤ ꯈꯨꯗꯣꯡ ꯆꯥꯕ ꯂꯩꯔꯕꯗꯤ ꯃꯊꯛꯇ ꯊꯝꯖꯈꯤꯕ
ꯄꯥꯛ ꯆꯥꯎꯕ ꯃꯐꯝꯗ ꯅꯤꯡꯊꯤꯅ ꯍꯥꯔ ꯑꯣꯜꯂꯕ ꯁꯟꯊꯤ ꯁꯟꯌꯨꯡꯒꯤ
ꯍꯥꯔ KE ꯒꯥꯔꯤ ꯃꯄꯣꯠ ꯑꯃ ꯍꯥꯞꯂꯒ ꯑꯗꯨꯝ ꯍꯥꯞꯄꯤꯕ ꯌꯥꯏ꯫
ꯂꯩꯕꯥꯛ ꯈꯔꯥ ꯀꯨꯞꯍꯟꯅꯕ ꯍꯣꯠꯅꯒꯅꯤ꯫ ꯑꯁꯨꯝꯅ ꯁꯦꯝꯂꯕ ꯃꯐꯝꯗ
ꯐꯨꯠ ꯑꯍꯨꯝꯃꯈꯥꯏ ꯄꯥꯛꯄ ꯐꯩꯗꯣꯝꯁꯤꯡ ꯆꯨꯔꯤ ꯅꯥꯏꯅ ꯇꯥꯛꯈꯠꯇꯨꯅ
ꯁꯦꯝꯕꯤꯒꯅꯤ꯫ ꯌꯥꯝꯅ ꯋꯥꯡꯅ ꯇꯥꯈꯠꯇ꯭ꯔꯕꯁꯨ ꯌꯥꯏ꯫ ꯐꯨꯠꯈꯥꯏ ꯐꯥꯅ
ꯇꯥꯈꯠꯇ꯭ꯔꯕꯁꯨ ꯌꯥꯏ ꯍꯥꯏꯕꯅꯤ꯫ ꯑꯁꯤꯒꯨꯝꯕ ꯃꯐꯝꯗ ꯄꯨꯡꯍꯨꯝ
ꯌꯥꯎꯕꯗ Probiotic ꯑꯁꯤ ꯁꯅꯥꯎꯗ ꯈꯣꯝꯊꯤ ꯐꯥꯏꯕ
ꯃꯇꯝ ꯄꯤꯖꯔꯒꯗꯤ ꯆꯥꯗ 39.9 ꯒꯤ ꯆꯥꯡꯗ ꯈꯣꯝꯊꯤ ꯐꯥꯏꯕ
ꯍꯟꯊꯍꯜꯂꯤ꯫

ꯂ) ꯁꯪꯒꯣꯝ ꯊꯣꯛꯄꯤ ꯁꯟꯗ ꯃꯈꯣꯏꯒꯤ ꯃꯆꯤꯟꯖꯥꯛꯇ
Probiotic ꯍꯥꯞꯂꯒ ꯄꯤꯖꯔꯒꯗꯤ ꯁꯪꯒꯣꯝ ꯊꯣꯛꯄꯒꯤ
ꯆꯥꯡ ꯍꯦꯟꯒꯠꯍꯜꯂꯤ, ꯃꯁꯤꯗꯁꯨ ꯅꯠꯇꯅ ꯁꯪꯒꯣꯝꯗ ꯌꯥꯎꯔꯤꯕ
ꯐꯦꯠ, ꯑꯃꯗꯤ ꯄ꯭ꯔꯣꯇꯤꯟ ꯒꯤ ꯆꯥꯡꯁꯨ ꯍꯦꯟꯒꯠꯍꯜꯂꯤ꯫
Aspergillus oryzae [arg Saccharnayces
cerclusiae ꯌꯥꯎꯕ Probiotic ꯁꯤ ꯁꯪꯒꯣꯝ ꯊꯣꯛꯄꯤ
ꯁꯟꯗ ꯄꯤꯖꯔꯒꯗꯤ ꯁꯪꯒꯣꯝꯒꯤ SNF (ꯈꯍꯦꯡꯛ Not
fat), ꯁꯪꯒꯣꯝ ꯊꯣꯛꯄꯒꯤ ꯆꯥꯡ ꯑꯃꯗꯤ ꯁꯪꯒꯣꯝꯗ ꯌꯥꯎꯕ
Protein ꯒꯤ ꯆꯥꯡ ꯍꯦꯟꯒꯠꯍꯜꯂꯤ꯫
ꯃ) ꯌꯦꯟꯗ Probiotic ꯍꯥꯞꯂꯒ ꯄꯤꯖꯕꯅ ꯃꯥꯒꯤ
ꯌꯦꯔꯨꯝ ꯀꯣꯛꯄꯒꯤ ꯆꯥꯡ ꯍꯦꯟꯒꯤꯍꯜꯂꯤ ꯑꯃꯗꯤ ꯌꯦꯔꯨꯝ
ꯊꯨꯅ ꯄꯨꯝꯕꯒꯤ ꯆꯥꯡꯁꯨ ꯅꯦꯝꯃꯤ꯫ ꯌꯦꯔꯨꯝ ꯃꯀꯨ ꯊꯥꯒꯠꯄꯗ
ꯅꯠꯇꯅ Calcium ꯒꯤ ꯆꯥꯡ ꯋꯥꯡꯍꯜꯂꯤ ꯑꯃꯗꯤ

Plasnea cholesterol [arg Ziglycinde
ꯀꯤ ꯆꯥꯡ ꯍꯟꯊꯍꯜꯂꯤ꯫ Probiotic ꯄꯤꯖꯕꯅ Meat

ꯀꯤ Quality ꯍꯦꯟꯒꯠꯍꯜꯂꯤ꯫ ꯃꯁꯤꯗꯁꯨ ꯅꯠꯇꯅ
Meat ꯇ ꯌꯥꯎꯔꯤꯕ ꯏꯁꯤꯡ ꯊꯨꯅ ꯀꯪꯍꯟꯕ ꯉꯝꯍꯟꯗꯦ꯫
Antibiotic e avgEckdf Feed additive

ꯑꯣꯏꯅ ꯍꯥꯞꯂꯒꯗꯒꯤ ꯍꯨ ꯆꯦꯅꯕꯒꯤ ꯆꯥꯡ, ꯝꯦꯦꯅꯗꯤꯧ,
Antibiotic xg Resistant [OTqxg vki \

ꯥꯝꯅ ꯋꯥꯡꯏ꯫ ꯑꯃꯗꯤ ꯎꯗꯍꯃꯛ spectnum Anti
biotic KgcgEeqr Kk KExg Intestenal
ꯇꯦꯍꯗꯃ ꯗ ꯑꯀꯥꯏꯕ ꯀꯥ ꯄꯤꯔꯤ ꯀꯥꯅꯔꯕ ꯍꯤꯡꯀꯨꯞ ꯀꯌ
ꯥꯕꯨ ꯅꯝꯊꯍꯜꯂꯒ ꯂꯥꯏꯅꯥ ꯊꯣꯛꯍꯟꯕ ꯉꯝꯕ ꯍꯤꯡꯀꯨꯞ
ꯀꯌꯥꯒꯤ ꯃꯁꯤꯡ ꯍꯦꯟꯒꯠꯍꯜꯂꯤ꯫ ꯃꯔꯝ ꯑꯁꯤꯅ
Probiotic e feed additive [OTe
ꯁꯤꯖꯤꯟꯅꯕꯅ ꯈ꯭ꯋꯥꯏꯗꯒꯤ ꯍꯦꯟꯅ ꯐꯩ꯫ Probiotic
ꯁꯤ Antibiotic ꯀꯤ ꯃꯍꯨꯠ ꯁꯤꯜꯂꯒ ꯑꯅꯥꯕ ꯂꯌ
ꯦꯡꯅꯕ ꯍꯤꯗꯥꯛ, ꯑꯣꯏꯅ ꯁꯤꯖꯤꯟꯅꯕꯒꯤ ꯃꯍꯨꯠꯇ ꯄꯨꯟꯅ
vGagEejx Intestinal flora balance
ꯇꯧꯅꯕ ꯍꯣꯠꯅꯕꯤꯒꯅꯤ ꯃꯁꯤꯅ ꯀꯥꯟꯅꯔꯕ ꯕꯣꯛꯇꯦꯔꯤꯌ
ꯥꯒꯤ ꯃꯁꯤꯡ ꯍꯦꯟꯒꯠꯍꯟꯗꯨꯅ ꯂꯥꯏꯅꯥ ꯊꯣꯛꯍꯟꯕ ꯉꯝꯕ
ꯍꯤꯡꯀꯨꯞꯁꯤꯡꯒꯤ ꯃꯁꯤꯡ ꯍꯟꯊꯍꯜꯂꯤ꯫

ꯃꯑꯣꯡꯗ ꯍꯨꯟꯕꯁꯨ ꯌꯥꯏ, ꯅꯠꯇ꯭ꯔꯒ ꯄꯔꯦꯡ ꯅꯥꯏꯅ ꯃꯔꯝ \
ꯥꯠꯂꯒ ꯍꯨꯟꯕꯁꯨ ꯌꯥꯏ꯫ ꯄꯨꯡꯍꯨꯝ ꯑꯣꯏꯔꯒꯅ ꯌꯣꯄꯤ ꯎꯀꯥꯏ
ꯑꯃꯒꯤ ꯃꯇꯦꯡꯅ ꯆꯥꯡ ꯃꯥꯟꯅꯅ ꯈꯣꯠꯇꯨꯅ ꯑꯣꯝꯕꯤꯒꯅꯤ꯫
ꯄꯔꯦꯡ ꯅꯥꯏꯅ ꯃꯔꯝ ꯌꯥꯠꯇꯨꯅ ꯍꯨꯜꯂꯒꯅ ꯄꯔꯦꯡ ꯌꯥꯠꯄꯒꯤ
ꯈꯣꯠꯇꯣꯛꯈꯤꯕ ꯂꯩꯕꯥꯛꯇꯨꯅ ꯀꯨꯞꯁꯤꯟꯕꯤꯒꯅꯤ꯫ ꯂꯧꯍꯣꯟ ꯈꯔꯥ
ꯊꯨꯅꯥ ꯍꯧꯅꯕ ꯅꯨꯃꯤꯠ ꯅꯤꯅꯤ-ꯍꯨꯝꯅꯤ ꯀꯥꯟꯅꯔꯒ ꯄꯦꯔꯦꯅ ꯏꯁꯤꯡ
ꯆꯥꯏꯕꯤꯒꯅꯤ꯫ ꯑꯁꯨꯝꯅ ꯁꯦꯝꯕ ꯂꯧꯍꯣꯟꯁꯨ ꯑꯗꯨꯃꯛ ꯃꯇꯤꯛ
ꯆꯥꯅ ꯐꯩ꯫ ꯂꯧꯍꯣꯟ ꯐꯣꯏꯕꯁꯨ ꯑꯗꯨꯃꯛ ꯅꯨꯉꯥꯏ꯫
ꯗꯥꯄꯣꯒ ꯂꯧꯍꯣꯟ:
ꯃꯑꯣꯡ ꯑꯁꯤꯗꯤ ꯂꯧ ꯂꯤꯡꯒꯗꯕ ꯂꯧꯐꯝꯗ ꯏꯁꯤꯡ
ꯁꯣꯏꯗꯅ ꯂꯩꯔꯦ ꯈꯪꯂꯕ ꯃꯇꯝꯗ ꯈꯔꯥ ꯊꯨꯅꯥ ꯂꯤꯡꯕ ꯉꯝꯅꯕ
ꯍꯨꯟꯕ ꯃꯑꯣꯡꯅꯤ꯫ ꯊꯦꯡꯖꯤꯜꯂꯛꯂꯕ ꯃꯇꯝꯗ ꯅꯣꯡ ꯆꯨꯔꯛꯇꯨꯅ
ꯂꯧꯐꯝꯗ ꯏꯁꯤꯡ ꯂꯩꯔꯕ ꯑꯗꯨꯒ ꯂꯧꯍꯣꯟꯅ ꯁꯦꯝꯍꯧꯗꯕ ꯃꯇꯝꯗ
ꯈꯨꯠꯂꯩ ꯊꯨꯅ ꯂꯧꯍꯣꯟ ꯐꯪꯅꯕ ꯍꯣꯠꯅꯕꯒꯤ ꯃꯑꯣꯡꯅꯤ ꯑꯁꯨꯝꯅ
ꯍꯨꯟꯕ ꯂꯧꯍꯣꯟ ꯅꯨꯃꯤꯠ 11-14 ꯅꯤꯗ ꯂꯤꯡꯕ ꯌꯥꯏ꯫
ꯍꯨꯟꯕꯒꯤ ꯃꯑꯣꯡ: ꯁꯪꯒꯝ ꯑꯃꯒꯤꯗꯃꯛ ꯐꯨꯠ 10 ꯄꯥꯛꯄ,
10 ꯁꯥꯡꯕ ꯃꯐꯝ ꯆꯪꯒꯅꯤ꯫ ꯃꯐꯝꯗꯤ ꯂꯩꯕꯥꯛꯀꯤ ꯂꯩꯃꯥꯏꯗ
ꯅꯠꯇ꯭ꯔꯒ ꯄ꯭ꯂꯥꯁꯇꯔ ꯇꯧꯕ ꯂꯩꯃꯥꯏꯗ ꯄ꯭ꯂꯥꯁꯇꯤꯛ ꯅꯠꯇ꯭ꯔꯒ
ꯂꯥꯐꯨꯒꯤꯃꯔꯨꯡ ꯂꯤꯠꯇꯅꯕ ꯁꯦꯝꯕꯤꯒꯅꯤ꯫ ꯅꯠꯇ꯭ꯔꯒ ꯑꯄꯨꯟꯕ
ꯃꯐꯝꯗꯨꯒꯤ ꯑꯣꯏꯅ ꯀꯣꯏꯁꯤꯟꯗꯨꯅ ꯏꯁꯤꯡ ꯂꯤꯠꯇꯅꯕ
ꯍꯣꯠꯅꯒꯅꯤ꯫ ꯑꯁꯨꯝꯅ ꯁꯦꯝꯂꯕ ꯃꯐꯝꯗ ꯐꯨꯠ ꯑꯍꯨꯝꯃꯈꯥꯏ
ꯄꯥꯛꯄ ꯑꯃꯁꯨꯡ ꯁꯥꯡꯕ ꯃꯐꯝꯗ ꯐꯧ ꯃꯔꯨ ꯀꯤꯂꯣ 2-3 ꯒꯤ
ꯆꯥꯡꯗ ꯍꯟꯖꯤꯟꯕ ꯌꯥꯏ꯫
ꯅꯣꯡꯃ ꯇꯤꯡꯂꯒ ꯅꯣꯡꯃ ꯑꯣꯝꯂꯕ ꯁꯦꯟꯗꯥꯡ
ꯃꯥꯈꯤꯌꯥꯠ ꯁꯥꯅ ꯃꯇꯣꯟ ꯊꯣꯛꯂꯕ ꯐꯧꯗꯤꯅ ꯍꯨꯟꯒꯅꯤ꯫ ꯆꯥꯡ
ꯃꯥꯟꯅꯅ ꯍꯨꯜꯂꯕ ꯃꯇꯨꯡꯗ ꯏꯁꯤꯡ ꯈꯤꯛ-ꯈꯤꯛꯇꯨꯅ ꯐꯧꯗꯤꯁꯤꯡ
ꯑꯗꯨ ꯇꯞꯅ ꯇꯞꯅ ꯈꯨꯠꯅ ꯅꯠꯇ꯭ꯔꯒ ꯎꯄꯥꯛ ꯑꯃ ꯁꯤꯖꯤꯟꯅꯗꯨꯅ
ꯅꯨꯃꯤꯠ ꯍꯨꯝꯅꯤ ꯃꯔꯤꯅꯤꯗꯤ ꯅꯝꯁꯤꯟꯕꯤꯒꯅꯤ꯫ ꯅꯣꯡꯃꯗ
ꯑꯅꯤꯔꯛꯀꯨꯝꯕ ꯏꯁꯤꯡ ꯆꯥꯏꯗꯨꯅ ꯀꯪꯗꯅꯕ ꯍꯣꯠꯅꯕꯒ ꯂꯣꯏꯅꯅ
ꯍꯥꯏꯔꯤꯕ ꯅꯨꯃꯤꯠ ꯑꯁꯤꯐꯥꯎꯕꯗꯤ ꯅꯝꯁꯤꯟꯕꯤꯒꯅꯤ꯫ ꯅꯨꯃꯤꯠ
ꯇꯔꯨꯛꯅꯤ ꯁꯨꯕꯗꯒꯤꯗꯤ ꯏꯁꯤꯡ ꯄꯥꯔꯞꯅ ꯂꯩꯅꯕ ꯍꯣꯠꯅꯒꯅꯤ꯫
ꯅꯨꯃꯤꯠ 11-14 ꯅꯤ ꯐꯥꯎꯕꯗ ꯂꯤꯡꯕ ꯂꯣꯏꯅꯕ ꯍꯣꯠꯅꯒꯅꯤ꯫
ꯂꯧꯍꯣꯟ ꯐꯣꯏꯕꯒꯤ ꯃꯑꯣꯡꯗꯤ ꯃꯈꯥꯗ ꯊꯥꯔꯤꯕ ꯄ꯭ꯂꯥꯁꯇꯤꯛ
ꯅꯠꯇ꯭ꯔꯒ ꯂꯥ ꯑꯗꯨ ꯊꯝꯂꯒ ꯐꯛ ꯀꯣꯟꯕꯒꯨꯝ ꯃꯔꯥꯅ ꯃꯄꯥꯟ
ꯊꯪꯅ ꯀꯣꯟꯁꯤꯜꯂꯒ ꯂꯣꯏꯔꯦ꯫ ꯃꯁꯤꯅ ꯃꯔꯤ ꯀꯣꯟꯁꯤꯜꯂꯕ
ꯂꯧꯍꯣꯟꯁꯤꯡ ꯂꯧꯕꯨꯛꯇ ꯄꯨꯊꯗꯨꯅ ꯇꯤꯡꯊꯣꯛꯂꯒ ꯃꯔꯥ \
ꯥꯝꯅ ꯁꯣꯛꯇꯅꯕ ꯃꯑꯣꯡꯗ ꯃꯊꯛꯀꯤ ꯂꯧꯍꯣꯟ ꯍꯨꯟꯕꯒꯤ
ꯃꯑꯣꯡꯁꯤ ꯑꯁꯤꯗꯒꯤ ꯆꯥꯟꯅꯒꯗꯕ ꯃꯑꯣꯡ ꯌꯦꯡꯗꯨꯅ
ꯂꯧꯍꯣꯟ ꯍꯨꯜꯂꯁꯤ꯫

ꯋꯥꯔꯣꯏꯁꯤꯟꯒꯤ ꯋꯥꯐꯝꯗꯤ ꯅꯩꯅꯗꯕ
ꯂꯥꯟꯕꯨꯡꯒꯨꯝ ꯎꯍꯜꯂꯒ ꯃꯤꯂꯤꯇꯔꯤꯒꯤ ꯁꯛꯇꯤ ꯎꯠꯄ ꯆꯨꯝꯂꯤꯕ꯭ꯔꯥ?

ꯃ ꯅꯤꯄꯨꯔꯗ ꯅꯤꯡꯊꯧ ꯄꯥꯜꯂꯤꯉꯩ ꯃꯇꯝ, ꯃꯤꯁꯤꯡ ꯌꯥꯝꯗ꯭ꯔꯤꯉꯩꯗ ꯃꯅꯤꯄꯨꯔ
ꯃꯅꯤꯡ ꯃꯈꯥ ꯇꯝꯕ ꯂꯩꯕꯛ ꯑꯃ ꯑꯣꯏꯅ ꯂꯩꯔꯝꯃꯤ ꯍꯥꯏꯕꯁꯤ ꯃꯥꯂꯦꯝꯒꯤ
ꯄꯨꯋꯥꯔꯤꯗꯒꯤ ꯃꯨꯠꯊꯠꯄ ꯌꯥꯔꯔꯣꯏꯗꯕꯅꯤ꯫ ꯅꯤꯡꯊꯧ ꯄꯥꯜꯂꯤꯉꯩ ꯃꯇꯝꯗ ꯊꯣꯛꯈꯤꯕ ꯊꯃꯣꯏ ꯁꯣꯛꯅꯤꯡꯉꯥꯏ ꯑꯣꯏꯕ ꯊꯧꯗꯣꯛꯁꯤꯡꯒꯤ ꯃꯅꯨꯡꯗ ꯆꯍꯤ 7 ꯈꯨꯟꯇꯥꯛꯄ ꯑꯃꯁꯨꯡ ꯈꯣꯡꯖꯣꯝ ꯂꯥꯟ ꯄꯟꯕ ꯌꯥꯏ꯫ ꯃꯇꯝꯗꯨꯗ ꯃꯅꯤꯄꯨꯔꯒ ꯌꯨꯝꯂꯣꯟꯅꯔꯤꯕ ꯃ꯭ꯌꯥꯟꯃꯥꯔ (ꯃꯇꯝꯗꯨꯗꯅ ꯙꯔꯃ) ꯒ ꯉꯥꯏꯍꯥꯛ ꯀꯥꯡꯗꯅ ꯂꯥꯟ ꯊꯦꯡꯅꯈꯤꯕ ꯂꯩꯈ꯭ꯔꯦ꯫ ꯅꯤꯡꯊꯧ ꯃꯆꯥꯁꯤꯡꯅ WA ꯃꯨꯟꯅꯔꯛꯄꯒꯤ ꯋꯥꯔꯤ ꯀꯌꯥ ꯂꯩꯈ꯭ꯔꯕꯁꯨ ꯃꯇꯝꯗꯨꯒꯤ ꯅꯤꯡꯊꯧ ꯑꯃꯁꯨꯡ ꯑꯊꯧꯕꯁꯤꯡꯅ ꯃꯅꯤꯄꯨꯔꯒꯤ ꯉꯝꯈꯩ ꯉꯥꯛꯇꯨꯅ ꯊꯝꯂꯝꯈꯤ꯫ ꯑꯗꯨꯕꯨ ꯃꯇꯝ ꯑꯃꯗ ꯂꯣꯏꯜꯝ ꯁꯟꯗꯣꯛꯄꯗ ꯍꯥꯂꯦꯡꯈꯤꯗꯕ ꯕ꯭ꯔꯤꯇꯤꯁ ꯂꯩꯉꯥꯛꯅ ꯏꯟꯗꯤꯌꯥ ꯈꯨꯗꯨꯝ ꯆꯟꯁꯤꯟꯗꯨꯅ ꯄꯥꯟꯈꯤꯕ ꯃꯇꯝꯗꯨꯗ ꯏꯟꯗꯤꯌꯟ ꯀꯌꯥꯅ ꯃꯈꯣꯏꯒꯤ ꯃꯅꯤꯡ ꯇꯝꯕ ꯍꯟꯖꯤꯟꯅꯕ ꯁꯇ꯭ꯔꯒꯜ ꯀꯌꯥ ꯆꯪꯁꯤꯟꯈꯤ꯫ ꯃꯃꯩꯊꯪꯗ ꯏꯟꯗꯤꯌꯥꯅ ꯃꯅꯤꯡ ꯃꯈꯥ ꯇꯝꯕ ꯐꯪꯂꯕ ꯃꯇꯨꯡꯗ ꯃꯤꯌꯥꯝꯒꯤ ꯑꯌꯥꯕ ꯌꯥꯎꯗꯅ ꯕꯣꯙꯆꯟꯗ꯭ꯔ ꯃꯍꯥꯔꯥꯖꯕꯨ ꯁꯤꯜꯂꯣꯡꯗ ꯀꯧꯔꯒ ꯅꯝꯗꯨꯅ ꯃꯔꯖꯔ ꯑꯦꯒ꯭ꯔꯤꯃꯦꯟꯠ KOT ꯇꯧꯍꯟꯗꯨꯅ ꯃꯅꯤꯄꯨꯔ ꯏꯟꯗꯤꯌꯟ ꯌꯨꯅꯤꯌꯟꯗ ꯌꯥꯎꯍꯟꯈꯤ꯫ ꯅꯤꯡꯊꯧ ꯄꯥꯟꯕ ꯂꯩꯕꯥꯛ ꯑꯃ ꯑꯣꯏꯅ ꯂꯩꯖꯔꯝꯕ ꯃꯅꯤꯄꯨꯔꯕꯨ ꯏꯟꯗꯤꯌꯟ ꯌꯨꯅꯤꯌꯟꯗ ꯄꯥꯔ꯭ꯠꯁꯤ ꯁ꯭ꯇꯦꯠ, ꯌꯨꯅꯤꯌꯟ ꯇꯦꯔꯤꯇꯣꯔꯤ ꯍꯥꯏꯗꯨꯅ ꯌꯥꯝꯅ ꯍꯟꯊꯕ ꯊꯥꯕꯛ ꯑꯃꯗ ꯊꯝꯕꯤꯔꯛꯈꯤ꯫ ꯑꯗꯨꯕꯨ ꯁ꯭ꯇꯦꯠ ꯑꯁꯤꯗ ꯂꯩꯔꯤꯕ ꯃꯤꯌꯥꯝ ꯑꯃꯁꯨꯡ ꯄꯣꯂꯤꯇꯤꯀꯦꯜ ꯄꯥꯔꯇꯤ ꯄꯨꯝꯅꯃꯛꯅ ꯑꯃꯠꯇ ꯑꯣꯏꯅ ꯆꯪꯁꯤꯟꯈꯤꯕ ꯏꯍꯧ ꯃꯇꯨꯡ ꯀꯨꯝꯖꯥ 1972 ꯒꯤ ꯖꯥꯅꯨꯋꯥꯔꯤ 21 ꯗ ꯃꯅꯤꯄꯨꯔ ꯃꯄꯨꯡ ꯐꯥꯕ ꯁ꯭ꯇꯦꯠ ꯑꯣꯏꯔꯛꯈꯤ꯫ ꯃꯗꯨ ꯐꯥꯎꯕꯗ ꯃꯦꯟꯂꯦꯟ ꯏꯟꯗꯤꯌꯥꯒꯤ ꯃꯐꯝ ꯀꯌꯥꯗ ꯂꯩꯔꯤꯕ ꯃꯤꯌꯥꯝꯅ ꯃꯅꯤꯄꯨꯔꯤꯁꯤꯡꯕꯨ 'ꯖꯪꯒꯂꯤ' ꯍꯥꯏꯕ ꯋꯥꯍꯩ ꯐꯥꯎꯕ ꯁꯤꯖꯤꯟꯅꯗꯨꯅ ꯀꯔꯦꯝ ꯀꯊꯥꯏꯅꯕ ꯑꯃꯗꯤ ꯁꯦꯟꯇꯔ ꯂꯩꯉꯥꯛꯅꯁꯨ ꯑꯇꯣꯝꯕꯤꯒꯤ ꯃꯆꯥꯒꯨꯝ ꯂꯣꯏꯅꯕꯤꯗꯨꯅ ꯂꯥꯛꯏ ꯑꯃꯗꯤ ꯃꯅꯤꯄꯨꯔꯤ ꯉꯝꯈꯩꯒꯤ ꯁꯔꯨꯛ ꯃꯥꯡꯍꯟꯈꯤ ꯍꯥꯏꯕꯒꯤ ꯅꯤꯡꯗꯣꯜ ꯄꯣꯝꯕ ꯂꯩꯔꯛꯈꯤ꯫ ꯇꯁꯦꯡꯅꯃꯛꯁꯨ ꯍꯧꯈꯤꯕ ꯆꯍꯤ 60 ꯍꯦꯟꯕꯒꯤ ꯃꯅꯨꯡ'ꯁꯤꯗ ꯃꯅꯤꯄꯨꯔ ꯌꯥꯎꯅ ꯑꯋꯥꯡ ꯅꯣꯡꯄꯣꯛ ꯂꯝꯗꯝꯕꯨ ꯁꯦꯟꯇꯔꯅ ꯊꯧꯑꯣꯏꯕꯤꯗꯕꯒ ꯂꯣꯏꯅꯅ ꯆꯥꯎꯈꯠ ꯊꯧꯔꯥꯡꯒ ꯃꯔꯤ ꯂꯩꯅꯅ ꯏꯟꯐ꯭ꯔꯥꯁꯇ꯭ꯔꯛꯆꯔ ꯑꯃꯠꯇ ꯁꯦꯝꯒꯠ ꯁꯥꯒꯠꯄꯤꯗꯅ ꯂꯩꯔꯛꯈꯤ꯫ ꯃꯥꯡꯖꯧꯅꯅ ꯎꯕ ꯉꯝꯕ ꯏꯟꯗꯤꯌꯥꯒꯤ ꯄꯣꯂꯤꯇꯤꯛꯁꯇ ꯁ꯭ꯀꯣꯂꯔ ꯑꯣꯏꯔꯤꯕꯁꯤꯡꯅ ꯂꯝꯗꯝ'ꯁꯤꯗ ꯑꯣꯏꯔꯛꯄ ꯌꯥꯕ ꯐꯤꯚꯝ ꯃꯥꯌꯣꯛꯅꯅꯕ ꯑꯥꯔꯝ꯭ꯗ ꯐꯣꯔꯁꯦꯁ ꯁ꯭ꯄꯦꯁꯜ ꯄꯋꯥꯔ ꯑꯦꯛ, 1958 ꯈꯨꯗꯣꯜ ꯄꯤꯅꯕ ꯁꯦꯝ ꯁꯥꯈꯤꯕꯗꯨ ꯉꯁꯤ ꯂꯝꯗꯝ'ꯁꯤꯒꯤ ꯃꯤꯌꯥꯝꯅ ꯍꯛꯊꯦꯡꯅꯅ ꯑꯦꯛ ꯑꯁꯤꯒꯤ ꯁꯥꯐꯨ ꯃꯥꯌꯣꯛꯅꯔꯤ꯫ ꯃꯅꯤꯄꯨꯔꯗ ꯍꯧꯖꯤꯛ ꯂꯩꯔꯤꯕ ꯈꯨꯠꯂꯥꯏ ꯄꯥꯏꯕꯒꯤ ꯏꯍꯧ ꯑꯁꯤ ꯆꯞ ꯆꯥꯕ ꯋꯥꯔꯣꯏꯁꯤꯟ ꯑꯃ ꯃꯇꯝ ꯆꯨꯞꯄꯒꯤ ꯑꯣꯏꯅ ꯄꯨꯔꯛꯅꯕ ꯍꯣꯠꯅꯕꯒꯤ ꯃꯍꯨꯠꯇ ꯗꯤꯚꯥꯏꯗ ꯑꯦꯟ ꯔꯨꯜ ꯄꯣꯂꯤꯁꯤ ꯁꯥꯟꯅꯗꯨꯅ ꯁ꯭ꯇꯦꯠ ꯑꯁꯤꯕꯨ ꯑꯆꯧꯕ ꯂꯥꯟꯕꯨꯡ ꯑꯃ ꯑꯣꯏꯅ ꯎꯍꯟꯅꯕ ꯄ꯭ꯔꯄꯦꯒꯟꯗ ꯁꯟꯗꯣꯛꯄꯒꯨꯝ ꯇꯧꯔꯦ ꯍꯥꯏꯅꯔꯛꯂꯦ꯫ ꯍꯟꯗꯛ ꯆꯥꯟꯗꯦꯜ ꯗꯤꯁꯇ꯭ꯔꯤꯛꯇ ꯊꯣꯛꯈꯤꯕ ꯂꯥꯏꯕꯛ ꯊꯤꯕ ꯊꯧꯗꯣꯛ ꯑꯗꯨꯒꯤ ꯃꯇꯨꯡꯗ ꯁꯦꯟꯇꯔ ꯂꯩꯉꯥꯛꯅ ꯌꯥꯝꯅ ꯍꯛꯆꯤꯟꯅ ꯂꯧꯗꯨꯅ ꯑꯀꯟꯕ ꯑꯣꯄꯔꯦꯁꯟ ꯆꯠꯊꯕ ꯂꯩꯔꯦ꯫ ꯅꯦꯁꯅꯦꯜ ꯊꯥꯛꯇ ꯂꯩꯕ ꯃꯤꯗꯤꯌꯥꯒꯤ ꯈꯨꯠꯊꯥꯡꯗ ꯀꯔꯤꯅꯣ ꯈꯪꯗꯕ ꯃꯑꯣꯗ ꯔꯤꯄꯣꯔ꯭ꯠ ꯀꯌꯥ ꯇꯧꯅꯔꯛꯄ ꯂꯩꯔꯦ꯫ ꯀꯗꯥꯏ ꯐꯥꯎꯕ ꯆꯨꯝꯕꯅꯣ ꯍꯥꯏꯕ ꯈꯪꯗꯅ ꯔꯤꯄꯣꯔ꯭ꯠ ꯀꯌꯥꯅ ꯏꯪꯅ ꯆꯤꯛꯅ ꯂꯩꯔꯤꯕ ꯁ꯭ꯇꯦꯠ ꯑꯁꯤꯕꯨ ꯂꯥꯟꯕꯨꯡ ꯑꯣꯏꯅ ꯎꯍꯟꯕꯗꯤ ꯆꯨꯝꯂꯣꯏ꯫ ꯃꯦꯟꯂꯦꯟ ꯏꯟꯗꯤꯌꯥꯒꯤ ꯑꯇꯩ ꯁ꯭ꯇꯦꯠꯁꯤꯡꯗ ꯈꯨꯠꯂꯥꯏ ꯄꯥꯏꯕꯁꯤꯡꯒꯤ ꯑꯦꯇꯦꯛꯇ ꯄꯔꯥ ꯃꯤꯂꯤꯇꯔꯤ ꯐꯣꯔ꯭ꯁꯀꯤ ꯄꯔꯁꯅꯦꯜ ꯃꯁꯤꯡ ꯌꯥꯝꯅ ꯍꯥꯠꯈꯤꯕ ꯂꯩꯈ꯭ꯔꯦ꯫ ꯑꯗꯨꯒꯨꯝꯕ ꯊꯧꯗꯣꯛ ꯑꯗꯨ ꯍꯛꯆꯤꯟꯅ ꯂꯧꯕ ꯂꯩꯔꯒꯁꯨ ꯃꯅꯤꯄꯨꯔꯕꯨ ꯑꯇꯩ ꯂꯝꯒꯤ ꯃꯤꯑꯣꯏꯁꯤꯡꯗ ꯑꯀꯤ-ꯇꯨꯖꯨꯡꯕ ꯐꯥꯎꯍꯟꯅꯕ ꯂꯥꯟꯕꯨꯡ ꯑꯣꯏꯅ ꯎꯍꯟꯕꯗꯤ ꯆꯨꯝꯂꯣꯏ꯫ ꯏꯃꯨ-ꯅꯥꯏꯃꯨ ꯇꯥꯅꯕ ꯍꯥꯏꯕꯁꯤ ꯃꯤꯑꯣꯏꯕ ꯈꯨꯟꯅꯥꯏꯗ ꯈ꯭ꯋꯥꯏꯗꯒꯤ ꯄꯥꯝꯗꯕ ꯑꯃꯅꯤ꯫ ꯆꯥꯟꯗꯦꯜ ꯑꯦꯝꯕꯨꯁꯀꯤ ꯊꯧꯗꯣꯛ ꯊꯣꯛꯐꯝꯗ ꯃꯤꯗꯤꯌꯥꯒꯤ ꯃꯤꯑꯣꯏꯁꯤꯡ ꯆꯪꯍꯟꯗꯕꯅ ꯑꯣꯄꯔꯦꯁꯟ ꯑꯗꯨꯒꯤ ꯑꯁꯦꯡꯕ ꯀꯔꯤꯅꯣ ꯍꯥꯏꯕꯗꯨ ꯃꯌꯦꯛ ꯁꯦꯡꯅ ꯈꯪꯗ꯭ꯔꯤ꯫ ꯊꯧꯗꯣꯛ ꯊꯣꯛꯐꯝ ꯃꯅꯥꯛ ꯑꯃꯁꯨꯡ ꯑꯀꯣꯏꯕ ꯃꯐꯝꯁꯤꯗ ꯂꯩꯔꯤꯕ ꯁ꯭ꯀꯨꯜꯁꯤꯡꯒꯤ ꯈꯨꯟꯖꯥꯁꯤꯡꯒꯤ ꯐꯤꯚꯝꯁꯨ ꯃꯌꯦꯛ ꯁꯦꯡꯅ ꯈꯪꯗ꯭ꯔꯤ꯫ ꯍꯥꯏꯅꯤꯡꯂꯤꯕꯗꯤ, ꯑꯁꯨꯝꯅ ꯂꯥꯟ ꯊꯦꯡꯅꯗꯨꯅ ꯈꯨꯠꯂꯥꯏꯒꯤ ꯑꯃꯗꯤ ꯃꯤꯂꯤꯇꯔꯤꯒꯤ ꯁꯛꯇꯤꯅ ꯏꯍꯧ ꯅꯝꯊꯅꯕ ꯆꯍꯤ ꯀꯌꯥ ꯆꯪꯅ ꯍꯣꯠꯅꯈꯤꯒꯗꯒꯦ? ꯏꯃꯨ-ꯅꯥꯏꯃꯨ ꯇꯥꯕ ꯍꯥꯏꯕꯁꯤ ꯅꯠꯇꯕ ꯌꯥꯝꯅ ꯏꯪꯅ ꯆꯤꯛꯅ ꯋꯥꯔꯣꯏꯁꯤꯟ ꯄꯨꯔꯛꯅꯕ ꯄꯨꯛꯆꯦꯜ ꯁꯦꯡꯅ ꯍꯣꯠꯅꯕꯅ ꯑꯆꯨꯝꯕ ꯈꯣꯡꯊꯥꯡ ꯑꯣꯏꯒꯅꯤ꯫ ꯃꯥꯂꯦꯝꯗ ꯑꯍꯥꯟꯕ, ꯑꯅꯤꯁꯨꯕ ꯂꯥꯟꯖꯥꯎ ꯊꯣꯛꯈ꯭ꯔꯦ, ꯃꯤꯑꯣꯏꯕ ꯈꯨꯟꯅꯥꯏꯗ ꯑꯋꯥꯕ ꯀꯌꯥ ꯊꯦꯡꯅꯈ꯭ꯔꯦ꯫ ꯃꯁꯤ ꯅꯠꯇꯕꯗ ꯂꯩꯕꯥꯛ ꯃꯅꯨꯡꯒꯤ ꯑꯣꯏꯕ ꯏꯍꯧ ꯀꯌꯥꯁꯨ ꯑꯗꯨꯝꯃꯛ ꯃꯥꯌꯣꯛꯅꯗꯨꯅ ꯂꯩꯕ ꯀꯌꯥꯁꯨ ꯂꯩꯔꯤ꯫ ꯈ꯭ꯋꯥꯏꯗꯒꯤ ꯑꯆꯨꯝꯕ ꯈꯣꯡꯊꯥꯡꯗꯤ ꯏꯪꯅ ꯆꯤꯛꯅ ꯃꯇꯝ ꯆꯨꯞꯄꯒꯤ ꯑꯣꯏꯕ ꯋꯥꯔꯣꯏꯁꯤꯟ ꯄꯨꯔꯛꯅꯕ ꯑꯁꯦꯡꯕ ꯑꯆꯨꯝꯕ ꯈꯣꯡꯊꯥꯡ ꯂꯧꯈꯠꯄꯅ ꯄꯨꯝꯅꯃꯛꯀꯤ \ꯥꯏꯐꯕ ꯑꯣꯏꯒꯅꯤ꯫

ꯍꯨꯏꯌꯦꯟ ꯂꯥꯟꯄꯥꯎ

...ꯑꯦꯗꯤꯇꯔꯗ ꯊꯥꯔꯛꯄ ꯆꯤꯊꯤ...

ꯗꯣꯅꯦꯁ꯭ꯋꯔ ꯀꯣꯟꯁꯝꯒꯤ 'ꯏꯔꯝ ꯂꯝꯂꯦꯟ ꯂꯝꯅꯨꯡꯁꯤ' ꯄꯥꯔꯨꯕꯗ
ꯏꯀꯥꯏ ꯈꯨꯝꯅꯖꯔꯤꯕ ꯑꯦꯗꯤꯇꯔ,
ꯏꯕꯗ-ꯄꯥꯕꯗ, ꯏꯁꯩ ꯁꯛꯄꯗ-
ꯇꯥꯕꯗ, ꯂꯤꯂꯥꯒꯤ ꯑꯦꯛꯇꯤꯡꯗ-ꯌꯦꯡꯕꯗ
ꯄꯨꯛꯅꯤꯡꯒꯤ ꯏꯍꯨꯟ (ꯃꯨꯗ) ꯍꯥꯏꯕꯁꯤ
ꯌꯥꯝꯅ ꯃꯔꯨꯑꯣꯏ, ꯑꯁꯦꯡꯕ ꯃꯍꯥꯎ
ꯄꯤꯅꯅꯕ-ꯂꯧꯅꯅꯕ꯫ ꯍꯟꯗꯛ ꯏꯁꯩ ꯃꯌ
ꯦꯛ ꯈꯔꯥ ꯏꯅꯅꯕ ꯄꯨꯛꯅꯤꯡꯒꯤ ꯏꯍꯨꯟ
ꯄꯣꯛꯅꯅꯕ ꯏꯁꯩ ꯁꯩꯔꯦꯡꯁꯤꯡ ꯄꯥꯗꯨꯅ
ꯁꯥꯟꯅꯩ, ꯑꯃꯨꯛꯁꯨ ꯐꯖꯕ ꯏꯁꯩꯁꯤꯡ
ꯇꯥꯗꯨꯅ ꯌꯦꯡꯏ, ꯀꯔꯤꯒꯨꯝꯕꯗ ꯆꯍꯤ
30/40 ꯒꯤ ꯀꯪꯁꯤꯟꯈ꯭ꯔꯕ ꯋꯥꯈꯜ
ꯄꯣꯞꯊꯣꯛꯍꯟꯗꯨꯅ ꯁꯥꯟꯅꯩ ꯏꯁꯩ ꯃꯌ
ꯦꯛ ꯏꯕꯁꯤꯁꯨ ꯂꯥꯏꯔꯝꯗꯦ꯫ ꯂꯥꯏꯔꯤꯛ
ꯐꯣꯡꯈ꯭ꯔꯕ ꯃꯇꯨꯡꯗ ꯑꯩꯉꯣꯟꯗ ꯆꯍꯤ
ꯑꯃꯔꯣꯝ ꯅꯝꯁꯤꯟꯗꯨꯅ ꯂꯩꯔꯝꯂꯕ
ꯗꯣꯅꯦꯁ꯭ꯋꯔ ꯀꯣꯟꯁꯝꯒꯤ ꯂꯥꯏꯔꯤꯛ
ꯑꯃ ꯊꯦꯡꯅꯩ- 'ꯏꯔꯝ ꯂꯝꯂꯦꯟ
ꯂꯝꯅꯨꯡꯁꯤ'꯫ ꯉꯛꯂꯤꯕꯗꯤ ꯑꯁꯨꯛ ꯐꯖꯕ
ꯂꯥꯏꯔꯤꯛꯁꯤꯕꯨ ꯀꯔꯤꯒꯤ ꯑꯩꯅ ꯄꯥꯕ
ꯆꯤꯠꯊꯗꯨꯅ ꯂꯩꯔꯝꯂꯤꯕꯅꯣ꯫ ꯈꯜꯂꯛꯏ-
ꯑꯣꯖꯥ ꯗꯣꯅꯦꯁ꯭ꯋꯔꯁꯤ ꯆꯠꯄ ꯈꯨꯗꯤꯡꯗ,
ꯁ꯭ꯇꯦꯖꯗ ꯁꯩꯔꯦꯡ ꯄꯥꯕꯗ, ꯋꯥ ꯉꯥꯡꯕꯗ
ꯃꯥꯒꯤ ꯈꯥꯎ (ꯕꯦꯒ) ꯑꯃ ꯌꯥꯟꯕ ꯇꯣꯛꯄ
ꯌꯥꯗꯦ, ꯃꯥꯒꯤ ꯈꯥꯎꯁꯤꯒ ꯋꯥꯍꯩꯒꯤ
ꯀꯥꯝꯗꯨꯍꯥ ꯑꯃ ꯃꯥꯏꯌꯣꯛꯋꯥ ꯁꯥꯟꯅꯕꯒꯨꯝ
ꯄꯨꯔꯤꯕ ꯖꯥꯠꯂꯥ? ꯑꯣꯟꯊꯣꯛꯅ ꯐꯖꯈ꯭ꯔꯦ꯫
ꯏꯔꯩꯕꯥꯛ ꯅꯨꯡꯁꯤꯕꯁꯤ ꯗꯣꯅꯦꯁ꯭ꯋꯔꯅ
ꯏꯍꯦꯟ ꯍꯦꯜꯂꯝꯒꯗꯕ ꯃꯥꯜꯂꯤ,
ꯃꯥꯅ ꯅꯨꯡꯁꯤꯅ ꯍꯥꯏ- 'ꯆꯔꯩ ꯐꯤꯃꯜ
ꯑꯣꯏꯔꯕꯁꯨ/ꯅꯪꯒꯤꯅꯤ ꯈꯟꯅ ꯁꯦꯠꯆꯔꯤ/
ꯄꯥꯝꯖꯗꯦ ꯉꯥꯡꯒꯣꯏ ꯄꯔꯦꯡꯁꯨ/
ꯅꯪꯒꯤ ꯅꯠꯇ꯭ꯔꯕꯗꯤ ꯏꯃꯥ꯫' (ꯂꯥ: 26)꯫
ꯃꯅꯤꯄꯨꯔꯒꯤ ꯇꯣꯞ-ꯇꯣꯞꯄ ꯑꯔꯤꯕ
ꯂꯟꯒꯩ ꯊꯤꯒꯠꯄꯗ ꯌꯧꯁꯤꯟꯅ ꯎꯕ
ꯉꯝꯃꯤ- 'ꯃꯥꯏꯀꯩ ꯃꯔꯤ ꯁꯨꯡꯗꯥꯏ ꯅꯤꯄꯥꯟ
ꯉꯥꯛꯂꯤ/ꯀꯧꯕ꯭ꯔꯨ ꯊꯥꯡꯖꯤꯡ ꯃꯥꯔꯖꯤꯡ
ꯋꯥꯡꯕ꯭ꯔꯦꯟ/ꯀꯣꯔꯧꯍꯟꯕ ꯏꯆꯨꯝ
ꯂꯥꯏꯔꯦꯝꯕꯤ/ꯀꯣꯟꯊꯧꯖꯝ ꯂꯥꯏꯔꯦꯝꯕꯤ
ꯈꯣꯔꯤꯐꯥꯕ/ꯀꯌꯥ ꯀꯌꯥꯅꯤ ꯂꯩꯔꯤꯕ ꯅꯪꯒꯤ/
ꯏꯃꯥ ꯅꯪꯒꯤ ꯅꯁꯥꯀꯣꯟꯁꯤꯗ ꯑꯉꯛꯄꯅ
ꯊꯜꯂꯤ/ꯏꯃꯥ ꯅꯡꯒꯤ ꯅꯔꯥꯟꯌꯥꯏꯁꯤꯗꯤ
ꯅꯨꯡꯁꯤꯕꯅ ꯊꯜꯂꯤ꯫"

ꯑꯗꯣꯝꯒꯤ,
ꯖꯥꯇꯤꯁꯣꯔ ꯕꯣꯡꯕ꯭ꯔꯝ
ꯊꯥꯡꯒ, ꯕꯤꯁꯅꯨꯄꯨꯔ ꯗꯤꯁꯇ꯭ꯔꯤꯛ
ꯂꯧꯎ-ꯁꯤꯡꯎꯒꯤ ꯋꯥꯍꯪ ꯄꯥꯎꯈꯨꯝ
ꯂꯧꯃꯤꯁꯤꯡꯒꯤ ꯀꯥꯈꯜ
1) ꯑꯥꯂꯨ ꯔꯣꯔꯥ ꯃꯔꯤꯈꯛ ꯂꯩꯖꯩ꯫ ꯆꯥꯅꯅꯕ ꯁꯦꯝ ꯁꯥꯕꯗ ꯃꯅꯨꯡꯗ
ꯇꯤꯟ ꯌꯥꯝꯅ ꯌꯥꯎꯔꯝꯕ ꯊꯦꯡꯅꯩ꯫ ꯆꯥꯅꯅꯕ ꯊꯝꯕ ꯅꯨꯉꯥꯏꯒꯗꯕ
ꯃꯥꯟꯗ꯭ꯔꯦ꯫ ꯍꯤꯗꯥꯛ ꯇꯣꯠꯂꯒ ꯊꯥꯅꯅꯕ ꯑꯣꯏꯅ ꯊꯝꯕ ꯌꯥꯒꯗ꯭ꯔꯥ?
- ꯍꯩꯔꯣꯛ ꯗꯦꯕꯦꯟ
- ꯍꯤꯗꯥꯛ ꯇꯣꯠꯂꯒ ꯊꯝꯕꯁꯨ ꯌꯥꯔꯔꯣꯏ꯫ ꯇꯤꯜꯁꯤꯡꯗꯨ ꯑꯥꯂꯨ
ꯃꯃꯤꯠꯇꯒꯤ ꯆꯪꯂꯛꯄꯅꯤ꯫ ꯃꯇꯣꯟ ꯊꯣꯛꯐꯝ ꯂꯩꯇꯕꯗ ꯅꯠꯇꯅ
ꯑꯥꯂꯨ ꯄꯨꯝꯕꯂꯣꯏꯅ ꯍꯨꯠꯈ꯭ꯔꯒꯅꯤ꯫ ꯃꯊꯪ ꯊꯥꯕꯗꯗꯤ ꯄꯣꯇꯦꯇꯣ
ꯇꯤꯎꯔ ꯃꯣꯊ ꯍꯥꯏꯅ ꯈꯪꯅꯕ ꯇꯤꯜꯁꯤ ꯌꯥꯎꯔꯛꯇꯅꯕ ꯊꯥꯕꯗ
ꯆꯦꯛꯁꯤꯟꯁꯤ꯫

2) ꯑꯩꯒꯤ ꯂꯧꯐꯝꯁꯤ ꯏꯁꯤꯡ ꯊꯥꯗꯣꯛ-ꯊꯥꯖꯤꯟꯗ ꯈꯨꯗꯣꯡ ꯈꯔꯥ
ꯆꯥꯏ ꯍꯥꯏꯗꯨꯅ ꯈꯔꯥ ꯉꯟꯅ ꯍꯨꯜꯂꯦ꯫ ꯏꯟꯆꯤ ꯑꯍꯨꯝ ꯃꯔꯤꯃꯨꯛ
ꯋꯥꯡꯂꯦ ꯑꯗꯨꯕꯨ ꯃꯇꯣꯟꯁꯤꯡꯗꯨ ꯏꯀꯪ ꯀꯪꯅ BT ꯀꯔꯤ ꯇꯧꯔꯒ
ꯃꯁꯥ ꯃꯎꯗꯨ ꯈꯔꯥ ꯐꯒꯠꯀꯗꯒꯦ?
- ꯆꯟꯗ꯭ꯔꯕꯥꯕꯨ ꯁꯤꯡꯍ, ꯏꯊꯥꯏ

- ꯍꯥꯔ ꯆꯥꯏꯕꯒꯤ ꯅꯤꯇꯤ ꯅꯤꯌꯝ ꯆꯨꯝꯗ꯭ꯔꯒꯁꯨ ꯄꯥꯝꯕꯤꯅ ꯗꯔ-
ꯀꯥꯔ ꯑꯣꯏꯕ ꯃꯆꯤꯟꯖꯥꯛꯀꯤ ꯆꯥꯡꯗꯨꯃꯛ ꯐꯪꯕ ꯉꯝꯗꯕꯗꯒꯤ
ꯃꯁꯥ ꯐꯠꯇꯅ ꯂꯩ꯫ ꯃꯅꯤꯄꯨꯔꯒꯤ ꯑꯌꯥꯝꯕ ꯃꯐꯝꯗ ꯐꯧ ꯍꯨꯟꯗ꯭-
ꯔꯤꯉꯩ ꯅꯠꯇ꯭ꯔꯒ ꯂꯤꯡꯗ꯭ꯔꯤꯉꯩ ꯕꯦꯁꯦꯜ ꯗꯣꯖ ꯑꯣꯏꯅ ꯍꯥꯔ
ꯍꯥꯞꯄ ꯃꯤꯑꯣꯏ ꯇꯥꯡꯏ ꯫ ꯍꯧꯔꯕ ꯃꯇꯨꯡꯗ ꯆꯥꯏꯕꯅ ꯑꯌ
ꯥꯝꯕꯅꯤ꯫ ꯃꯁꯤꯅ ꯃꯔꯝ ꯑꯃ ꯑꯣꯏꯔꯝꯕ ꯌꯥꯏ꯫

ꯑꯇꯣꯞꯄ ꯃꯔꯝ ꯑꯃꯅ ꯏꯉꯦꯜꯂꯥꯏ ꯆꯨꯕꯤ-ꯇꯤꯜ ꯇꯥꯕ ꯑꯣꯏ-
ꯔꯝꯕ ꯌꯥꯏ꯫ ꯃꯅꯥ ꯃꯇꯣꯟꯗꯨ ꯆꯔꯨ ꯃꯆꯨ ꯃꯥꯟꯕ ꯑꯃꯁꯨꯡ ꯂꯣꯡꯖ-
ꯤꯟꯒꯨꯝ ꯇꯨꯝꯅ ꯂꯩꯕ; ꯈꯨꯕꯤ-ꯈꯨꯗꯣꯝꯕꯤ ꯑꯅꯤꯅ ꯐꯧꯅꯥ ꯃꯇꯣꯟꯗꯨ
ꯆꯞꯄꯒ ꯅꯥꯟꯕꯗ ꯀꯦꯡꯂꯕꯗꯤ ꯏꯉꯦꯜꯂꯥꯏ ꯆꯨꯕꯤ ꯑꯣꯏꯒꯅꯤ꯫
ꯃꯁꯤꯒꯤꯗꯃꯛꯇꯤ Chlorpyriphos 20% ꯃꯤꯂꯤꯂꯤ-
ꯇꯔ 25 ꯏꯁꯤꯡ ꯂꯤꯇꯔ 15 ꯈꯨꯗꯤꯡ ꯌꯥꯜꯂꯒ ꯐꯧꯅꯥꯁꯤꯡ ꯆꯣ-
ꯠꯍꯟꯕꯗ ꯅꯠꯇꯅ ꯂꯧꯔꯤ ꯐꯥꯎꯕ ꯆꯣꯠꯅꯕ ꯀꯥꯞꯊꯣꯛꯄꯤꯌꯨ꯫
3) ꯉꯁꯤꯗꯤ ꯐꯧ ꯃꯈꯜ ꯌꯥꯝꯅ ꯂꯩꯔꯦ꯫ CAU, ICAR

- ꯗꯥ ꯁꯔꯥꯡꯊꯦꯝ ꯖꯦꯁꯃꯥꯔꯥꯅꯤ

- ꯑꯦꯁ ꯁꯨꯃꯪꯒꯣꯜ ꯁꯤꯡꯍ

[aKbi Agri.Dept [aKbi KVK KgirKb
ꯃꯈꯜ ꯀꯌꯥꯒꯤ ꯐꯧꯗꯤ ꯐꯪꯂꯦ꯫ ꯑꯗꯨꯕꯨ ꯀꯔꯝꯕ ꯃꯈꯜꯅ
ꯈ꯭ꯋꯥꯏꯗꯒꯤ ꯐꯕꯒꯦ? ꯑꯅꯤꯈꯛꯇ ꯍꯥꯏꯕꯤꯌꯨ꯫
ꯀꯦ ꯃꯅꯥꯎꯕꯤ ꯁꯤꯡꯍ
ꯁꯥꯕꯜ ꯇꯣꯡꯕ
- ꯈ꯭ꯋꯥꯏꯗꯒꯤ ꯐꯕꯥ ꯐꯧ ꯃꯐꯜ ꯍꯥꯏꯕ ꯑꯃ ꯂꯩꯇꯦ꯫ ꯆꯥꯊꯣꯛ
ꯌꯥꯝꯅ ꯋꯥꯡꯕ, ꯊꯣꯠꯄ, ꯇꯨꯒꯟꯗꯕ, ꯂꯥꯏꯅꯥ ꯇꯥꯒꯟꯗꯕ,
ꯂꯧꯐꯝꯗꯗꯤ ꯀꯦꯟꯗꯕ ꯌꯩꯕꯗꯅ ꯋꯥꯗꯕ, ꯅꯨꯃꯤꯠ ꯍꯨꯝꯅꯤ
ꯃꯔꯤꯅꯤ ꯏꯁꯤꯡꯒ ꯂꯥꯛꯁꯤꯟꯈ꯭ꯔꯕꯁꯨ ꯏꯁꯤꯡ ꯍꯟꯊꯈ꯭-
ꯔꯕ ꯃꯇꯨꯡꯗ ꯀꯔꯤꯁꯨ ꯀꯥꯏꯗꯅ ꯍꯧꯕ ꯑꯃꯁꯨꯡ ꯑꯄꯥꯝꯕ
ꯃꯒꯨꯟ ꯈꯨꯗꯤꯡꯃꯛ ꯌꯥꯎꯕ ꯐꯧ ꯃꯈꯜ ꯂꯩꯇꯦ꯫ ꯏꯁꯥꯅ ꯄꯥꯝꯕ
ꯃꯒꯨꯟ ꯑꯅꯤ ꯑꯍꯨꯝ ꯌꯥꯎꯔꯕꯗꯤ ꯌꯥꯔꯦ ꯍꯥꯏꯅ ꯈꯟꯕꯤꯌꯨ꯫
ꯏꯁꯥꯒꯤ ꯂꯩꯔꯤꯕ ꯂꯧꯐꯝꯗꯨꯒ ꯆꯥꯅꯕ ꯐꯧ ꯃꯈꯜꯁꯤꯡꯒꯤ
ꯃꯅꯨꯡꯗꯒꯤ ꯑꯃ ꯈꯟꯕꯤꯌꯨ꯫