Dr. Dale Hill - Crabby Patty Formulas

Dr Hill is a nutritionist for most farm animals. He and Dr Elton Herbert wrote the 2015 Hive and the Honey Bee Chapter 9 – "Honey Bee Nutrition"

Full (2h 6 min) presentation: https://www.youtube.com/watch?v=n|T8k|4Sqa0

At 1:24 – he starts talking about feeding, to include the below method:

For winter feeding (while the queen is not laying from mid-Oct through mid-February in general),

I use 90% sucrose (table sugar), 10% pollen substitute or protein supplement (different names, same concept), and enough water to make this sticky so that it doesn't fall out of the Ziploc baggies (4.5 lbs sugar, 0.5 lbs pollen sub, 7-8 oz warm water - mix and place into 1 gallon Ziploc baggies with 2 pieces of wood about 3/4" x 3/4" x 3 to 4").

For late winter and spring feeding,

I increase the pollen substitute to 30-40% and decrease sugar to 60-70%, and about the same amount of water - then put into the Ziploc bags.

Cut a few slits between wood pieces and set cut side down on top bars then put insulation above it to fill in whatever shim box or medium super you placed above the bees to make room

Since pollen substitutes are typically 40-50% protein, this provides about 4-5% protein during the winter months when bees cannot make cleansing flights, and about 14-15% protein (using 30% protein supp) or 17-20% protein (when using 40% protein supp) when the queen starts laying eggs.

Too much protein when bees cannot make cleansing flights increases susceptibility to Nosema.

Use the 17-20% protein patty formula as needed during pollen dearth, such as a very cold or late spring. Use the 14-15% protein patty formula during a normal spring when bees are bringing in some early pollen.



Crabby Patty with wood inserts – image provided by Dr. Dale Hill