Tying Ssissith

Question: I have heard that you disagree with Rambam's opinion regarding how one should tie ssissith. I understand that you claim that tying according to Rambam is not feasible. Could you please explain why?

Answer: For a shitta regarding the tying of ssissith to be viable, it must comply with the following requirements:

1. **It must be possible to tie according to that shitta even if one wishes to make ssissith of the minimal length stipulated in the Talmudh** (Bavli M'nahoth 41b 31), i.e. **4 aghudhalim (8-9 cm)**. (This refers to the entire length of the strings, see Rambam's MT Hilkhoth Ssissith 1:6. This view of Rambam and most Rishonim and is very correct, even though some authorities disagree.) One may of course make the ssissith longer, and this is usually the case. However, if according to a given shitta it is impossible to tie ssissith so that the overall length (g'dhil and 'anaph, see below) does not exceed 4 aghudhalim, that shitta is not an option.
2. Ssissith consist of **g'dhil** (the tied portion) and **'anaph** (the loose portion). This requirement is min haTora (Hilkhoth Ssissith 1:1-2) and is based on two Tora verses (B'midhbar 15:38 and D'varim 22:12). The Talmudh (Bavli M'nahoth 39a 27) states that if one tied only one hulya (leaving the rest of the ssissith untied, i.e. 'anaph), or tied many hulyoth so that *most* of the length of the ssissith consists of g'dhil (with only a short length left as 'anaph), the ssissith are kasher. **The ideal is 1/3 g'dhil and 2/3 'anaph** (Hilkhoth Ssissith 1:8-9).
3. The difficulty is that **Rambam's shitta cannot be made to fit all these criteria**. According to Rambam z'l at least 7 hulyoth are required, each hulya consisting of 3 k'rikhoth (coils). In addition, a gap is required between one hulya and the next (Hilkhoth Ssissith 1:7-8). That section, the g'dhil, should be approximately 1/3 the entire length. If you attempt this you will rapidly discover that Rambam's shitta, while aesthetically pleasing, necessitates ssissith considerably longer than the stipulated minimum of 4 aghudhalim.
4. One's only resort would be to use strings the thickness of sewing thread. **This is simply impracticable** (I do not believe such strings exist, and even if such threads were available they would certainly tear in short order). Not to mention the fact that ssissith should be seen ("Ur'ithem otho" – B'midhbar 15:39), and such strings would be difficult to see.
5. If according to Rambam's shitta the only way to tie ssissith of the minimal overall length while maintaining the 1/3-2/3 ratio is to either tie just one or two hulyoth, or tie the normally required 7 hulyoth and end up with an extremely short 'anaph – then clearly Rambam's shitta is problematic. (The g'dhil, or t'kheleth, cannot make up the entire length. The fact that it might be just possible to tie according to Rambam by making the g'dhil half of the total minimal length simply serves to prove that this shitta cannot be correct.)
6. **Ramban** (Haqdama to Milhamoth HaShem) points out that Halakha is not mathematics. Absolute 100% certainty is not necessary and is generally unattainable; **it is sufficient to demonstrate that a position is unlikely**. All attempts to defend Rambam's position

regarding this matter that I have seen or heard are extremely unlikely and farfetched, to say the least. In such a case one should accept that Rambam was mistaken regarding this Halakha.

7. **The correct shitta is that of Ra'vadh based on R. Natronay Gaon**. This is the only one that fits the sources like a glove. (I cannot elaborate here; I intend, with HASHEM's help, to write an in-depth t'shuva regarding this matter in Hebrew.) According to this interpretation, **the numbers 7-13 mentioned in the Braytha** (TB M'nahoth 39a 31) **refer not to the number of hulyoth but rather to the number of k'rikhoth in each hulya**. **The number of hulyoth is deliberately unspecified**; it all depends on the total length desired, and one makes as many or as few hulyoth as required (each hulya being between 7 and 13 k'rikhoth) in order to maintain the 1/3-2/3 ratio.
8. Some people believe that one must have 4 hulyoth of 7, 8, 11 and 13 k'rikhoth respectively; this is an assumption based on common practice (minhagh) but has no Halakhic basis. Being able to make ssissith considerably shorter than many people believe required is important; shorter ssissith are less prone to getting caught or trailing on the ground, resulting in tearing, becoming dirty, or being unwieldy.
9. **When t'kheleth is available, one ties with 2 strings simultaneously, one white and one t'kheleth**, creating a white/t'kheleth pattern (always adding one more white coil at the end of the hulya which should begin and end with white). If t'kheleth is unavailable, one ties using one white string.
10. This shitta of Ra'vadh/R. Natronay Gaon is mentioned and accepted by certain other Rishonim, and **is in fact the shitta that most Jews have been following for centuries without actually realizing it**. It also happens to be the simplest method for tying ssissith.

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