**Experimental protocols including solution recipes**

It is a common practice that experimental protocols include solution recipes. These are a set of instructions for preparing a particular mixture, solution, buffer.

These solutions are **input variables**, they participate in some manual tasks of the protocol.

The protocol titled “[Leaf Clearing Protocol to Observe Stomata and Other Cells on Leaf Surface](https://bio-protocol.org/bio101/e2538)” includes 3 solutions (Clearing solution, 1 N KOH, Hoyer’s solution) in the materials and reagent section. The method of preparation is available in the Recipe section.

"@type":"p-plan:Plan",

"@id":"https://bio-protocol.org/bio101/e2538",

"description":"This protocol describes a method clearing of leaves for visualizing stomata including other epidermal cells and obtaining good quality images for publishing in peer-reviewed journals",

"p-plan:hasInputVar": [

{

"@type": "p-plan:Variable",

"@id": "http://plex.org/var\_14",

"rdf:value": "Clearing solution",

},

{

"@type": "p-plan:Variable",

"@id": "http://plex.org/var\_15",

"rdf:value": "1 N KOH"

},

{

"@type": "p-plan:Variable",

"@id": "http://plex.org/var\_16",

"rdf:value": "Hoyer’s solution"

}

]

**Main question:**

How to represent, in the PlEx ontology, that some input variables could have manual tasks?