

I think I found a new species, now how do I illustrate it?

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The user can draw using a simple mouse and pressing the shift key on the keyboard to digitally ink the pencil line. Credit: Dr. Giuseppe Montesanto

When aiming to express a concept or convey a message, the use of visual material is certainly a clearer and more understandable method compared to a text-only description.

Images facilitate the reading of a text by providing an easy and immediate visual explanation. In biosystematics, descriptions of new plant and animal taxa are always combined with figures and plates in order to illustrate the anatomical parts and body details.

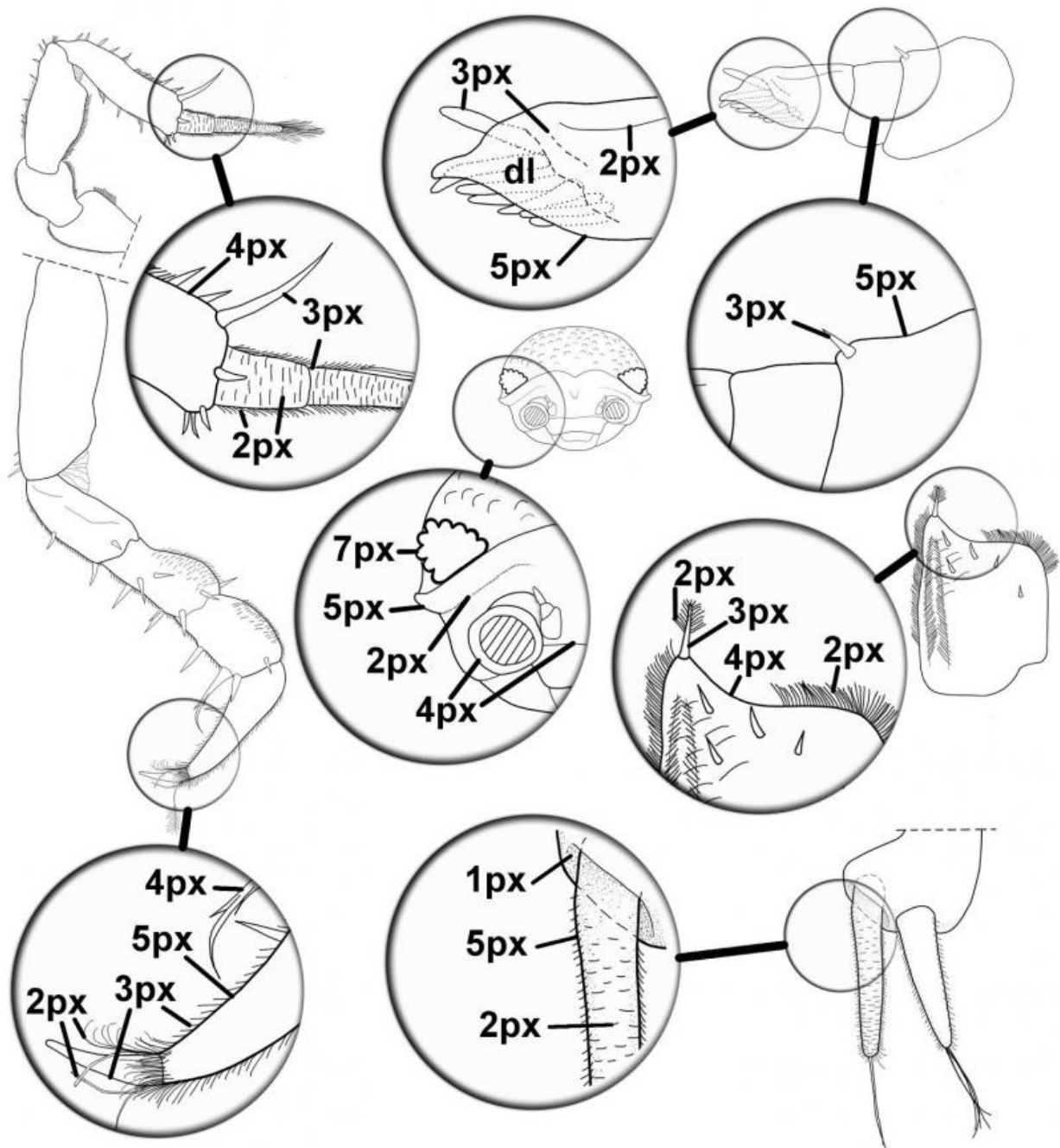
Taxonomists need images of good quality in describing taxa. As a rule, [drawings](#) are better detailed than stereo or light microscope [photographs](#) since some details, which are often barely visible in a photograph, can be highlighted in the drawing.

Nowadays only digital figures (drawings or photographs) are accepted by the most important journals of taxonomy. The usual method used so far to digitalise a conventional drawing is by scanning, however a simple scan does not always represent correctly the complex ink figure.

The new method, developed by Dr. Giuseppe Montesanto in the University of Pisa (Italy), to produce digitised drawings straight on your computer using specialised software.

The paper published in *ZooKeys* provides simple step-by-step instructions for users to produce noteworthy results with this easy method.

The procedure in short makes use of bitmap graphics with the [GNU Image Manipulation Program \(GIMP\)](#). The method is very accurate, producing detailed lines at the highest resolution and the raster lines appear as realistic ink-made drawings.



An example of a plate with scientific illustrations of a new woodlice species
Credit: Dr. Giuseppe Montesanto

Additional advantages are that it is faster than the traditional way of

making illustrations and everyone can use this simple technique. The method is also completely free as it does not use expensive and licensed software and it can be used with different operating systems.

'When you describe a new species for scientific literature, the illustrations are not an addition to your description. They are an integral part of it. You may not be a great artist (although many biologists are talented artists), but with this [method](#) you can learn to do adequate drawings'. adds Dr. Montesanto.

More information: Montesanto G (2015) A fast GNU method to draw accurate scientific illustrations for taxonomy. In: Taiti S, Hornung E, Štrus J, Bouchon D (Eds) Trends in Terrestrial Isopod Biology. *ZooKeys* 515: 191-206. [DOI: 10.3897/zookeys.515.9459](https://doi.org/10.3897/zookeys.515.9459)

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