

# Two new species of freshwater planarian (Platyhelminthes, Tricladida, Dugesiidae, *Dugesia*) from Southern China exhibit unusual karyotypes, with a discussion on reproduction in aneuploid species

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**Table S1. Genetic distances for COI. Highest and lowest distance values between the two new Chinese species and congeners indicated in blue and red, respectively. Green: distance value between the two new species.**

	<i>S. mediterranea</i>	<i>S. polychroa</i>	<i>R. postrema</i>	<i>D. adunca</i>	<i>D. aethiopica</i>	<i>D. afromontana</i>	<i>D. arabica</i>	<i>D. arcadia</i>	<i>D. ariadnae</i>	<i>D. benazzii</i>	<i>D. bifida</i>	<i>D. bijuga</i>	<i>D. circumcisa</i>	<i>D. constrictiva</i>	<i>D. cretica</i>	<i>D. elegans</i>	<i>D. etrusca</i>	<i>D. gemmulata</i>	<i>D. gibberosa</i>	<i>D. gonocephala</i>	<i>D. granosa</i>	<i>D. hepta</i>	<i>D. majuscula</i>	<i>D. naiadis</i>	<i>D. notogaea</i>	<i>D. pustulata</i>	<i>D. sagitta</i>	<i>D. semiglobosa</i>	<i>D. sicula</i>	<i>D. sigmoides</i>	<i>D. sinensis</i>	<i>D. subtentaculata</i>	<i>D. tumida</i>	<i>D. umbonata</i>	<i>D. verrucula</i>	<i>D. musculosa</i>	<i>D. pendula</i>						
<i>S. mediterranea</i>																																											
<i>S. polychroa</i>	14.90%																																										
<i>R. postrema</i>	25.45%	24.75%																																									
<i>D. adunca</i>	37.05%	35.30%	32.56%																																								
<i>D. aethiopica</i>	36.37%	34.33%	36.67%	19.71%																																							
<i>D. afromontana</i>	35.80%	36.21%	37.36%	20.95%	12.18%																																						
<i>D. arabica</i>	36.11%	34.39%	37.02%	20.08%	0.00%	12.10%																																					
<i>D. arcadia</i>	34.67%	30.07%	36.74%	14.67%	20.69%	20.21%	20.81%																																				
<i>D. ariadnae</i>	39.84%	33.21%	39.53%	16.27%	21.96%	21.22%	22.08%	7.50%																																			
<i>D. benazzii</i>	37.03%	33.50%	37.33%	16.52%	20.94%	18.69%	20.81%	9.84%	9.81%																																		
<i>D. bifida</i>	35.89%	33.34%	34.71%	18.19%	19.05%	17.80%	19.41%	16.30%	20.16%	16.09%																																	
<i>D. bijuga</i>	40.79%	36.19%	38.58%	20.62%	21.23%	21.47%	21.10%	19.93%	20.09%	18.18%	21.15%																																
<i>D. circumcisa</i>	35.80%	32.92%	36.71%	16.12%	19.97%	17.48%	20.10%	12.48%	13.79%	11.13%	17.74%	18.27%																															
<i>D. constrictiva</i>	41.76%	37.11%	39.21%	20.68%	25.42%	21.82%	25.53%	16.36%	16.52%	15.66%	22.96%	23.51%	15.92%																														
<i>D. cretica</i>	40.47%	34.98%	37.37%	14.64%	21.95%	19.96%	22.31%	9.23%	8.96%	9.21%	18.19%	20.35%	14.99%	16.11%																													
<i>D. elegans</i>	38.89%	30.34%	37.33%	16.06%	20.69%	21.71%	20.81%	7.51%	6.07%	9.17%	17.73%	20.40%	13.81%	15.61%	10.69%																												
<i>D. etrusca</i>	38.06%	36.89%	39.01%	18.01%	21.27%	18.50%	21.39%	11.58%	13.61%	10.96%	19.47%	21.19%	15.47%	15.86%	11.86%	13.59%																											
<i>D. gemmulata</i>	37.94%	34.38%	38.57%	17.22%	24.79%	20.69%	24.89%	13.31%	15.10%	14.00%	20.36%	20.14%	12.43%	17.82%	14.00%	14.21%	17.26%																										
<i>D. gibberosa</i>	35.58%	31.22%	35.27%	19.95%	20.66%	15.61%	20.52%	15.42%	15.16%	14.21%	14.56%	20.69%	17.05%	18.49%	16.56%	12.88%	17.06%	18.48%																									
<i>D. gonocephala</i>	38.89%	34.98%	40.18%	17.22%	21.20%	20.19%	21.31%	11.14%	8.75%	9.21%	19.02%	19.62%	14.30%	16.83%	10.49%	10.47%	10.97%	16.06%	16.09%																								
<i>D. granosa</i>	35.54%	33.82%	36.47%	20.01%	21.68%	15.74%	21.54%	17.82%	18.79%	16.17%	15.12%	22.54%	18.09%	20.06%	17.82%	17.58%	17.63%	19.03%	11.15%	18.31%																							
<i>D. hepta</i>	38.38%	34.17%	39.04%	15.78%	21.08%	19.16%	20.93%	10.02%	9.75%	3.56%	17.10%	20.22%	11.41%	16.07%	10.03%	9.76%	11.21%	14.05%	13.54%	9.32%	15.64%																						
<i>D. majuscula</i>	40.51%	34.42%	38.62%	17.94%	20.45%	19.19%	20.56%	13.74%	15.60%	16.08%	18.89%	22.40%	15.60%	15.66%	17.02%	12.62%	16.55%	17.46%	17.25%	16.77%	19.25%	16.31%																					
<i>D. naiadis</i>	36.06%	34.63%	36.37%	20.72%	13.71%	12.20%	13.86%	23.53%	24.53%	22.24%	21.60%	24.33%	20.05%	23.06%	21.97%	22.21%	23.11%	24.81%	17.86%	21.71%	18.96%	21.35%	21.20%																				
<i>D. notogaea</i>	36.44%	29.53%	32.55%	13.32%	20.96%	19.69%	21.07%	11.97%	13.99%	13.34%	19.16%	20.84%	14.49%	18.79%	15.87%	13.30%	16.08%	15.58%	17.75%	15.83%	18.53%	14.30%	13.97%	21.22%																			
<i>D. pustulata</i>	35.20%	33.04%	32.02%	16.22%	22.08%	20.98%	21.92%	15.21%	17.97%	15.72%	19.58%	15.96%	17.08%	18.60%	16.70%	15.20%	15.99%	15.21%	16.99%	16.73%	18.63%	15.37%	18.23%	22.34%	15.94%																		
<i>D. sagitta</i>	36.44%	32.62%	34.60%	13.29%	20.45%	19.94%	20.81%	7.72%	8.54%	9.18%	17.74%	19.64%	12.72%	15.63%	8.12%	8.36%	12.02%	14.90%	14.00%	9.81%	17.83%	8.60%	15.38%	20.71%	14.45%	13.98%																	
<i>D. semiglobosa</i>	36.71%	33.50%	35.20%	16.05%	19.73%	19.46%	19.60%	12.04%	11.78%	13.56%	18.67%	18.45%	11.59%	18.69%	13.80%	13.13%	15.43%	15.35%	17.56%	13.55%	19.77%	14.06%	17.27%	21.48%	14.25%	17.22%	12.67%																
<i>D. sicula</i>	34.34%	33.50%	37.32%	20.33%	6.32%	9.85%	6.28%	20.09%	22.08%	21.06%	18.67%	21.37%	19.85%	24.17%	21.80%	21.09%	19.62%	23.59%	18.78%	23.86%	19.28%	20.93%	21.56%	13.84%	21.06%	21.37%	20.32%	17.43%															
<i>D. sigmoides</i>	36.28%	32.50%	36.58%	20.19%	21.37%	15.40%	21.23%	17.55%	17.76%	15.17%	15.51%	21.92%	18.03%	19.70%	17.51%	15.41%	18.50%	19.22%	1.93%	18.00%	11.47%	14.83%	17.97%	18.59%	19.20%	17.78%	15.66%	18.75%	19.22%														
<i>D. sinensis</i>	39.51%	33.52%	37.32%	16.27%	21.21%	19.19%	21.07%	12.03%	13.33%	13.36%	19.68%	18.44%	14.54%	19.29%	14.26%	13.58%	17.09%	15.63%	16.81%	15.39%	19.77%	12.35%	15.62%	21.45%	15.65%	15.95%	11.34%	11.82%	19.85%	17.53%													
<i>D. subtentaculata</i>	38.90%	33.51%	38.88%	15.35%	20.96%	20.48%	21.07%	7.52%	9.83%	8.80%	17.98%	17.24%	13.21%	16.62%	9.88%	9.39%	10.32%	14.47%	15.62%	8.16%	16.63%	9.59%	13.75%	23.28%	14.45%	14.73%	9.62%	13.13%	20.82%	17.30%	12.70%												
<i>D. tumida</i>	38.27%	35.58%	37.02%	17.46%	21.69%	21.47%	21.55%	15.38%	17.49%	15.40%	21.12%	21.40%	16.35%	15.50%	17.98%	14.67%	17.28%	18.48%	18.47%	18.54%	18.06%	15.81%	14.46%	24.38%	17.49%	18.24%	15.85%	17.48%	21.30%	18.93%	16.30%	16.35%											
<i>D. umbonata</i>	37.02%	31.76%	35.82%	14.20%	21.44%	17.46%	21.56%	12.64%	12.85%	13.07%	18.18%	17.97%	9.18%	14.47%	13.52%	13.99%	14.45%	10.69%	15.36%	13.97%	15.22%	13.53%	14.20%	21.23%	13.99%	14.46%	11.31%	11.10%	19.82%	15.40%	12.65%	12.86%	15.14%										
<i>D. verrucula</i>	40.50%	37.72%	42.47%	22.12%	23.00%	21.72%	22.85%	16.76%	17.49%	15.58%	21.91%	21.35%	17.03%	15.44%																													