

Fig. S1. MSP records in *Z. vivipara* of one representative (A) UVS, (B) SWS, (C) MWS and (D) LWS pigment. Curves correspond to the Gaussian function best fitted with the pigment absorbance profil.

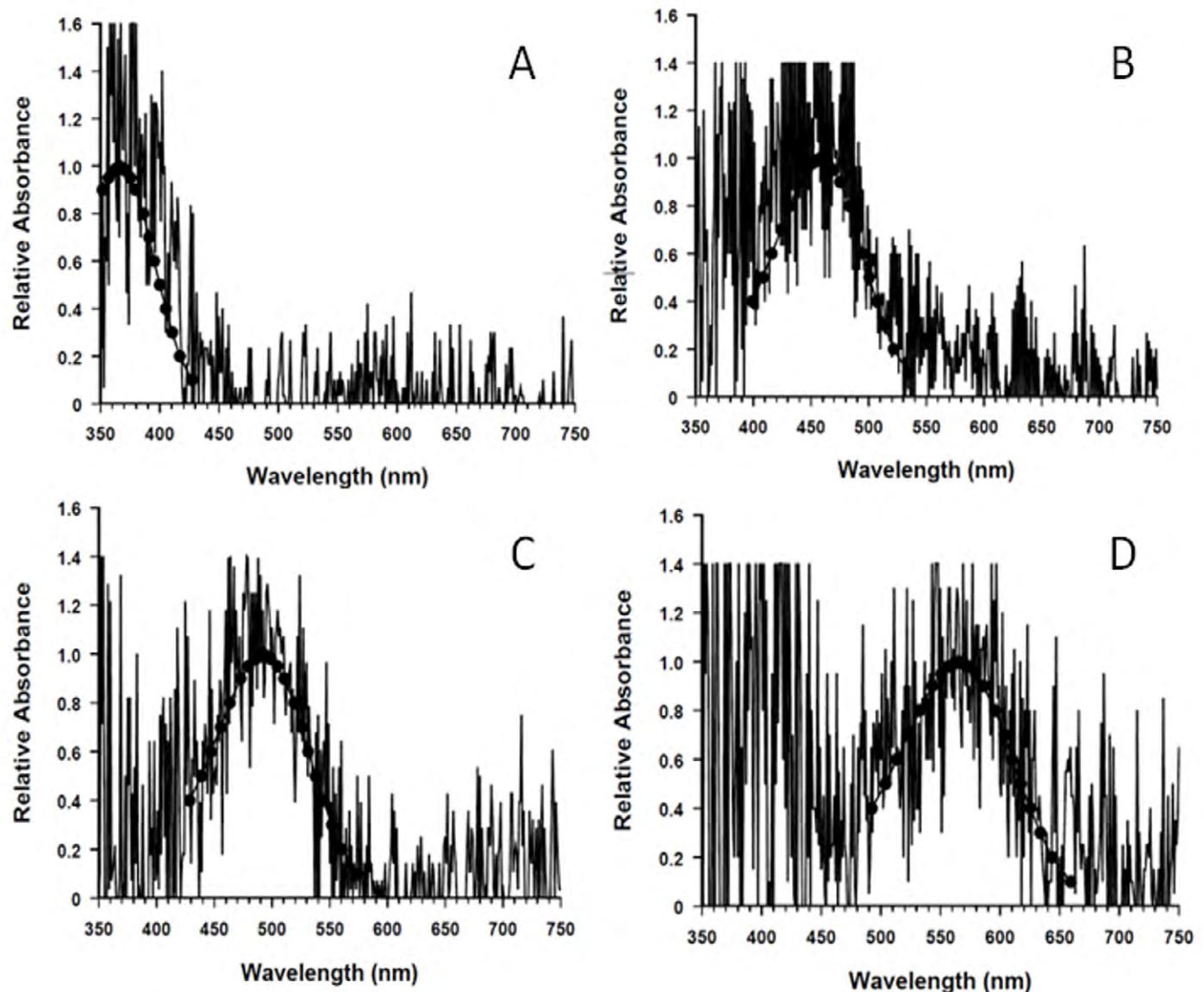


Fig. S2. Same as Fig. S1 for representative pigments in *P. muralis*.

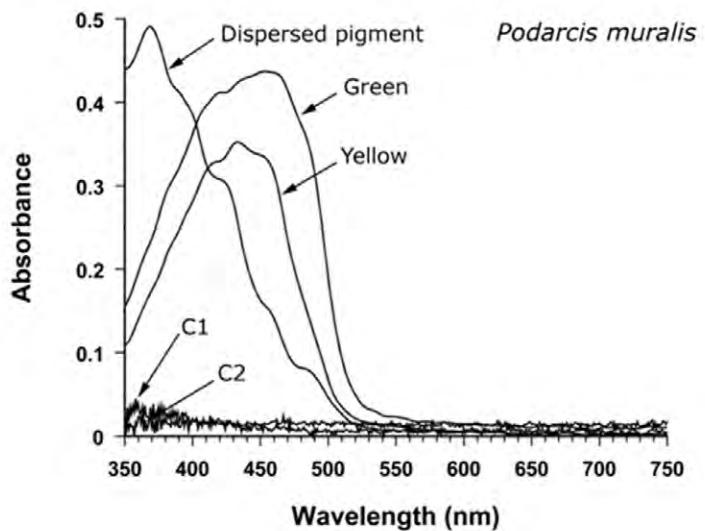
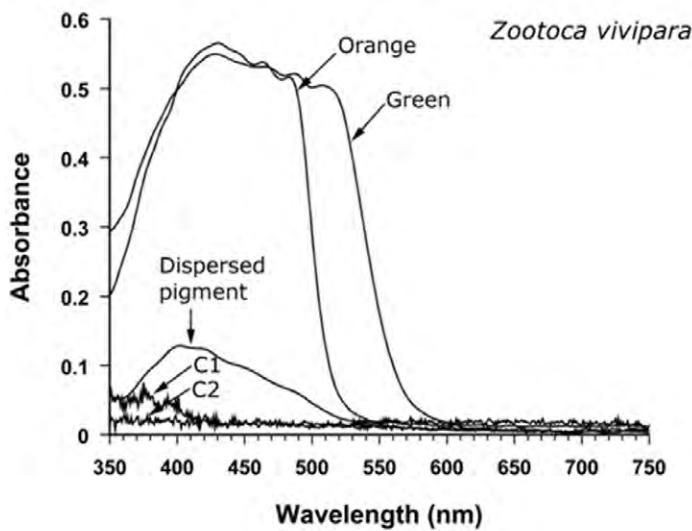


Fig. S3. Representative absorption spectra from MSP recordings of dispersed inner segment pigment and four classes of inner segment oil droplets in *Z. vivipara* and *P. muralis*. See Table 2 for quantitative data.

Table S1. Synthesis of MSP data on visual systems in squamate lizards. We reported the mean λ_{max} (nm) and λ_{mid} (nm) value \pm s.d. (except when sample size is one) from the literature for photopigments and oil droplets, respectively.

Species name	Vitamine	λ_{max} (nm) of photopigments				λ_{mid} (nm) of oil droplets			Reference
		UVS	SWS	MWS	LWS	G	Y	C	
IGUANIA									
<i>Anolis bahorucoensis</i>	A1	365 \pm 6	450 \pm 6	500 \pm 6	569 \pm 4	500 \pm 6	450 \pm 7	397	Loew & al. (2002)
<i>Anolis carolinensis</i>	A2	365 \pm 5	462 \pm 5	503 \pm 8	625 \pm 3	507 \pm 4	463 \pm 5	365 \pm 2	Loew & al. (2002)
<i>Anolis conspersus</i>	A1	365 \pm 7	460 \pm 7	500 \pm 7	562 \pm 3	515 \pm 5	475 \pm 6	368 \pm 2	Loew & al. (2002)
<i>Anolis cristatellus</i>	A1	365 \pm 6	458 \pm 4	492 \pm 5	562 \pm 4	507 \pm 5	463 \pm 5	371	Loew & al. (2002)
<i>Anolis equestris</i>	A1	None	460 \pm 9	492 \pm 11	565 \pm 8	506 \pm 4	470 \pm 6	388	Loew & al. (2002)
<i>Anolis evermanni</i>	A1	364 \pm 5	460 \pm 5	490 \pm 3	565 \pm 3	515 \pm 7	500 \pm 6	380 \pm 4	Loew & al. (2002)
<i>Anolis extremus</i>	A1	365 \pm 7	451 \pm 7	487 \pm 9	566 \pm 5	488 \pm 5	442 \pm 4	393 \pm 3	Loew & al. (2002)
<i>Anolis garmani</i>	A1	None	467 \pm 10	496 \pm 9	565 \pm 8	492 \pm 4	466 \pm 5	371	Loew & al. (2002)
<i>Anolis grahami</i>	A1	367 \pm 8	460 \pm 6	495 \pm 7	565 \pm 6	505 \pm 10	451 \pm 6	382	Loew & al. (2002)
<i>Anolis gundlachi</i>	A1	365 \pm 7	450 \pm 9	490 \pm 7	564 \pm 5	510 \pm 4	450 \pm 6	370	Loew & al. (2002)
<i>Anolis krugi</i>	A1	365 \pm 5	448 \pm 6	490 \pm 5	562 \pm 4	500 \pm 5	480 \pm 5	370 \pm 3	Loew & al. (2002)
<i>Anolis lineatopus</i>	A1	366 \pm 5	449 \pm 2	498 \pm 4	560 \pm 2	486 \pm 8	451 \pm 4	367	Loew & al. (2002)
<i>Anolis opalinus</i>	A1	None	450 \pm 5	496 \pm 5	566 \pm 5	G1 521 \pm 3 G2 497 \pm 6	471 \pm 5	375 \pm 4	Loew & al. (2002)
<i>Anolis pulchellus</i>	A1	367 \pm 8	446 \pm 7	495 \pm 8	565 \pm 7	505 \pm 6	475	390	Loew & al. (2002)
<i>Anolis sagrei</i>	A1	365 \pm 3	460 \pm 6	495 \pm 5	567 \pm 4	510 \pm 5	475 \pm 3	376 \pm 2	Loew & al. (2002)
<i>Anolis stratulus</i>	A1	366 \pm 6	454 \pm 7	494 \pm 6	564 \pm 4	495 \pm 5	467 \pm 4	388	Loew & al. (2002)
<i>Anolis valencienii</i>	A1	None	456 \pm 8	500 \pm 8	560 \pm 9	522 \pm 2	479 \pm 4	368	Loew & al. (2002)
<i>Crotaphytus dickersonae</i>	A1	359 \pm 1	459 \pm 1	481 \pm 1	558 \pm 1	521 \pm 1	489 \pm 1	373 \pm 1	Macedonia et al. (2009)
<i>Polychrus marmoratus</i>	A1	None	453 \pm 5	490 \pm 3	568 \pm 4	G1 520 \pm 2 G2 485 \pm 5	462	368 \pm 2	Loew et al. (2002)
<i>Ctenophorus ornatus</i>	A1	None	440 \pm 1	493 \pm 9	571 \pm 4	Present	Present	C2 +	Barbour et al. (2002)
<i>Chamaeleo dilepis</i>	A1/A2	383 \pm 5	444 \pm 4	477/507	555/615	None	Y1 493; Y2 486	C1 390; C2 +	Bowmaker, Loew & Ott (2005)
<i>Furcifer pardalis</i>	A1/A2	375 \pm 6	444 \pm 6	490 \pm 4	555/610	None	490	C1 390; C2 350	Bowmaker, Loew & Ott (2005)
GEKKOTA									
<i>Gekko gekko</i>	A1	364 \pm 3	467 \pm 2	None	521 \pm 1	N/A	N/A	N/A	Loew (1994)
<i>Hemidactylus turcicus</i>	A1	366	467	None	526	N/A	N/A	N/A	Loew et al. (1996)
<i>Hemidactylus garnotii</i>	A1	363	464	None	521	N/A	N/A	N/A	Loew et al. (1996)
<i>Teratoscincus scincus</i>	A1	365	452	None	533	N/A	N/A	N/A	Loew et al. (1996)
<i>Gonatodes albogularis</i>	A1	362 \pm 3	475 \pm 5	None	542 \pm 5	N/A	N/A	Present	Ellingson, Fleishman & Loew (1995)
SCINCIMORPHA									
<i>Platysaurus broadleyi</i>	A1	364 \pm 1	451 \pm 2	492 \pm 3	570 \pm 2	518 \pm 4	Y1 476 \pm 4 Y2 467 \pm 2	C1 380 C2 +	Fleishman et al. (2011)

All species are diurnal excepted *Gekko gekko*, *Hemidactylus turcicus*, *Hemidactylus garnotii* and *Teratoscincus scincus*. Photopigments UVS: ultraviolet-wavelength-sensitive, SWS: short-wavelength-sensitive, MWS: medium-wavelength-sensitive, LWS: long-wavelength-sensitive. Droplets with green (G), yellow (Y) or colourless (C) oil. A same oil droplet class can present two spectral types referred to as, for example, G1 and G2. C2 oil droplets can have a λ_{mid} close or below the detection threshold of MSP, the presence of these oil droplets is then indicated by a '+' sign.